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THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

VOL. XI.

BALTIMORE, FEBRUARY, 1874.

No. 2.

DIVERSIFY LABOR AND CROPS.

The Middle and Southern States have too long stuck to specialties in crops. The system has been injurious to the lands and ruinous to the pecuniary interests of the owners. The Middle States are slowly abandoning the system and gradually redeeming their errors of the many years past. But the South, we fear has made few strides in that direction, although we are rejoiced to see that the agricultural press and intelligent orators are awake to the importance of the change and there will, under these influences, we sincerely trust and hope, speedily be accomplished a thorough reformation, which will work out the brilliant destiny of the South that nature has laid up in the womb of time.

To *live within ourselves* should be the maxim and rule of action, as far as possible, in the South. Why should it be dependent on the North for shoes, hats, wooden buckets, brooms? The Southern people have all the material, indeed often send north at a low price the material of which these things are made, and when returned, after being manufactured, they pay high prices for the same. They have a superabundant amount of negro labor which is suited to these particular domestic manufactures, and if it was directed and encouraged in these channels of industry, immense sums would be saved at home, idleness would become industry and thrift, in numbers of instances, would supplant poverty. Broom-corn-growing and broom-making is an immense business in the North, and yet the bash can be grown at half cost and the brooms could be made by negro labor at half the cost, in the South.

With the immense fields lying idle why should the South expend vast sums in the West for meat, when it would cost almost nothing to raise its own meats. So rapidly do the different kinds of domestic animals propagate their species, more especially in a warm, genial climate, that it will require only a few years, if there be an united effort

made by the property holders, to have a superabundance of herds and flocks, enabling the South to be sellers instead of buyers. Thus it would have more wool than necessary for home wants; more beef; more bacon; more cheese; butter and milk. Condensed milk would no longer be sent from the North to dilute the coffee of the proprietor of thousands of acres of rich grass lands. The proceeds of the sales of the cotton crop would no longer be exhausted in payment for meats, and other articles of food and for clothing. With an abundance of the necessaries and luxuries of life, and home-manufactories of every class, the Planter would not be forced to send his cotton into the Northern market until the price justified his doing so.

Fruits and wine-making, are sources of great profit, requiring not much labor, in a country so well adapted to their production.

In many parts of the Southern States there are splendid primeval forests the wealth of which the people have not availed themselves, but purchase from the North timber, various parts of buildings, furniture, even buckets and tubs. This course is suicidal. Another diversity of farm product would be raising mules and horses, instead of annually sending away hundreds of thousands of dollars to the West for their supply. To do this, however, there must be a diversity of crops, less cotton and more corn and grain of all sorts. To enable them to raise both stock and grain they must grow grass, improved grasses, hay-grasses, such as clover and timothy. We know of nothing which would infuse more animation in the languishing Agriculture of the South; enable the people to have more and far better stock of all sorts; invigorate the impoverishing soils and renovate the worn out lands, than the cultivation of clover in connexion with a free use of plaster. South Carolina has within her borders a mine of almost inexhaustible wealth in her fields of bone phosphate and marine deposits, which have become world renowned for its great value as a fertilizer. As to the fertilizing qualities

of clover, we will quote from *Dr. Voelcker*, who sums them up in a nutshell, as follows :

"All who are practically acquainted with the subject must have seen that the best crops of wheat are produced by being preceded by some crops of clover grown for seed. I have come to the conclusion that the very best preparation, the very best manure, is a good crop of clover. * * * A vast amount of mineral manure is brought within reach of the corn crop, which otherwise would remain in a locked up condition in the soil. The clover plants take nitrogen from the atmosphere, and manufacture it into their own substance, which on decomposition of the clover roots and leaves, produces abundance of ammonia. In reality the growing of clover is equivalent to a great extent to manuring with Peruvian guano; and in this paper of mine I show that you obtain a larger quantity of manure than in the largest dose of Peruvian guano which a farmer would ever think of applying."

In this connexion we would recommend a greater attention to the sowing of peas, for plowing under as a green manure, to fertilize the wheat crop and stimulate the young clover sown with the wheat. The mildness of the climate would admit of clover being sown wherever the wheat was, or any time from October to April, and it soon vegetate and receive no check in its growth from cold, thus getting such roots and tops as would enable it to withstand the hot suns of Summer and even a severe drought.

Among other small industries is Poultry. By securing the best breeds, immense sums of money could be realized from the shipments of eggs and poultry to the large cities of the North.

In those portions of the South suited to the growth of tropical fruits, great attention ought to be paid to their cultivation with an eye to transportation of the products to Northern markets.

While making these practical suggestions as to the diversity of products and labor in the South, we would not have our friends sieze upon every chimera, such as we see sometimes advocated in some of our contemporary journals, such as the cultivation of the Persimmon—a troublesome pest in the fields, as any one will admit if he will cut down one of the trees. He will find the persimmon bushes will spring up and spread like sassafras.

We read lately an able address of the *Hon. C. C. Langdon*, at the Agricultural Fair, held at *Eufaula, Alabama*, which we should have published, but at the time our crowded columns prevented. We commend its serious perusal to every Southern planter and farmer. It develops new ideas; makes many wise suggestions, and inculcates sound

clear practical principles for the the future guide of all who desire to make the South self-reliant, independent and prosperous. To do this, his programme is condensed in the following propositions:—

"1st. Cease renting land to negroes on shares, and pay only stipulated wages for labor.

2d. In hiring laborers, give the preference to our own southern negroes of good character, and avoid all *forced* or *bribed* importations from abroad.

3d. An entire change in our system of agriculture, so as to increase, at least, fourfold, the productive capacity of our soil, without additional labor; and cultivate no more land than we can make thus productive.

4th. Diversify the products of the farm, so as to make at home, so far as practicable, everything we need to eat, drink, wear, and use; and then make all the cotton we can, as a surplus cash crop.

5th. Sell of our surplus lands, on easy terms, first, to our own poor, but respectable citizens, who have no land and are willing to work; or, second, to substantial *voluntary* immigrants, who will settle upon and cultivate them.

6th. Encourage the introduction of foreign capital and skilled labor, to engage in mining and manufacturing.

7th. Compel the Legislature of our State to declare null and void all *fraudulent* bonds issued by the authority of a corrupt and corrupted legislature.

8th. More reading, agricultural and political; more general intelligence, and more circumspection at the ballot-box; less devotion to party, and more regard for the honor, good name, and material interests of our country.

9th. Get out of debt, and then keep out.

10th. Work ourselves, and educate our sons and daughters to work."

These 10 propositions he elucidated and enforced with great ability, and earnestness. These are golden rules. The bare reading them over will favorably impress every thinking mind. Every Southerner we think would do wisely in making the effort to carry them into practical effect.

THE CORN CROP.

As a strong fact to prove what we have said several times lately, that corn and other grain must, owing to the demand both at home and abroad, pay a remunerative price to the farmer, we have the statement from the Agricultural Department at Washington, of the shortness of the corn crop. The Department estimates that the crop will fall short of last year's yield 250,000,000 bushels. The acreage of this year is four per cent. less than that of last year, and the total yield 23 per cent. less. This startling fact should be noted and corn producers be thereby somewhat governed in their movements as to the delivery and marketing this enormously valuable product.

Agricultural Calendar.

FARM WORK FOR FEBRUARY.

It is presumed that every farmer has already formed his plans for the year and settled upon a line of duties and employments to be followed. He has calculated his means and resources, and determined what fields are to be cultivated and what crops he will plant, so that he may work intelligently toward the accomplishment of his purposes. If he has not done so, he should set about it at once and have all the plans for the year well matured before he is called upon by the Seasons to execute them. We think we may safely give words of hope and encouragement to the farmers as to their reaping a fair, living reward for such crops as they may produce, and indeed for all farm products. The signs of the times are significant of remunerative prices. The certain great demand in Europe, for grain, must enhance during the year the price of corn, wheat and flour, &c. Very large shipments are already being made, and the same may be said of lard, bacon, beef, cheese and other provisions. It is said a large amount of *fresh beef* will be sent to Europe the present year. Now, it is not necessary to argue the facts, to the plainest understanding, that, as we are not producers of grain, or even meats, to any very large extent, beyond our own consumption, that if heavy drafts are made upon our products for foreign shipments, that the supply will not equal the home demand, and hence as the demand will be beyond the full supply that those products must, by the laws of trade, be greatly enhanced in their market values. It is true that speculators may form rings and reap the reward, instead of the increased price going into the pockets of the producers, but this should be guarded against by a combined effort on the part of producers. It is just here that we can all see the want of that intelligence and harmony of action on the part of the farming community. By *intelligence*, we mean, that perfect knowledge of the amount of products and the existing demand for them at home and abroad, so that advantage may be taken of the true condition of affairs. This can only be done, by reading the Agricultural and other Journals that enlighten farmers upon such subjects, and by Farmer's Clubs, keeping up a correspondence with each other, so that a uniform rule of action may be pursued by all. This state of things also is pregnant with suggestions as to many matters which a farmer may have neglected or purposely disregarded. They show, we think, pretty clearly that we should abandon specialties

in crops, and pay more attention to a diversity, and especially to rearing more stock—horses, cattle, sheep and hogs. Beef and bacon are already too high for farmers to buy for their own consumption, and yet many do so. It will be higher before the year is over, then why not save this expense and raise some to sell beyond a home supply. It can be done easily if you only set about it now in earnest, making your preparations, to raise one or more fine colts, five or six calves; increase your dairy; prepare to graze a few cattle; increase the number and quality of your flock of sheep and supply yourself with a few brood sows of some improved breed, whose spring pigs will, if well fed, which is the most economical way, make killing hogs by the close of the year averaging over 200 lbs. We will not pursue, at present, this subject, but ask your kind attention to our hints as to what is proper to be done on the farm this month, if the weather permits, which it usually does for at least half the month, even if severe weather follows in March.

FIRE-WOOD.

This is probably the last month you will have time to cut wood for next year's burning, therefore do so, if possible. Remember, it takes less dry than green wood to give out the same heat, there is more comfort in it; in every cord of green wood your team hauls not *certainly* less than 1000 pounds of water, and that has to be evaporated before your wood burns, or rather it requires enough heat to drive off that amount of water before you get the full benefit of the heat. It is economy every way to have dried wood—many a rail and plank would be saved by having dry wood, and not forcing the fire-makers to be hunting kindlings to make the green wood burn.

BREEDING SOWS AND STORE HOGS.

Let your hogs be well attended, kept dry, and should they by chance have the mange wash them well with pot-liquor, scrubbed with a corn cob or stiff brush, put them a clean pen with a dry bed of leaves; give a little sulphur in their mush and in a few days they will be well. Should any of the sows be likely to farrow, put her in a pen to herself at least a week before the event, and feed moderately, giving her plenty of dry leaves or cut straw and she will soon manufacture a warm bed for her forthcoming progeny. Let the sow be kept quiet and free from annoyances and she will prove a careful mother.

COWS AND OTHER CATTLE.

Work oxen must be well fed this month if good, hard work is expected of them in the Spring. Look well to the in-coming cows, and especially heifers with their first calves. Keep them separate, especi-

ally at night, and see that they have a box stall or warm open shed in which to bring forth their young. Be cautious as to their food after calving, and do not do as many do, feed high on heating food, like corn, as soon as she has dropt her young. Young cattle require your care this and next month particularly.

SHEEP.

If lambs are expected this month, the greatest care should be bestowed on the ewes, not by high feeding, but to see that they are protected and made safe against storms, dogs and foxes, and from being frightened and raced by the intrusion of hunters with their hounds or pointers in their pasture. They should have some meal and turnips, or oats, and after yeaning give turnips with a little salt for a day or so and then feed generously on oats, bran, meal and turnips, alternating or changing their food. Mutton should be prepared for the butcher quickly, unless you desire to keep them until you shear, and then sell off the grass. If they are intended for market in March or April, give them plenty of clover or other good hay, to each a gill of shelled corn in the morning, turnips and oil-cake at noon, and a pint of oats or or oats and bran (mill-feed) at night. If no turnips or oil-cake, substitute a gill of corn at noon.

FENCING.

This is a good month to repair and make new fences. Fix up the gates and bars if you will be so old-timy and behind the times as to have them, do have them in order, so they can be easily taken down and put up.

PLOWING AND HAULING.

If you have any stiff field or spots in a field you design for crop, and have not already done so, plow them the first open spell. Haul to the mill all the saw logs you mean to have sawed, so that your plow team will not be diverted from your Spring plowing.

OATS.

Embrace every opportunity that the weather and condition of the ground offer, to sow oats. Plow them in with small or gang-plows then harrow and sow clover and orchard grass. More clover is killed by sun than frost, was the saying of an old, observing and practical farmer, whom we knew long ago, and he was right. He always tried to sow his oats in February or March and always made good crops. We allude to Southern Maryland and Virginia more particularly, but hold it be good doctrine for any section, if the land is in order for the reception of seed. We once knew a field to be sown in oats and clover seed during a fine spell in this month and soon after there came

severely cold weather and snows so that the ground froze deeply and continued until April, and finer oats and a better stand of clover we never saw.

TOBACCO.

At all proper times continue to strip and condition, but do not pack your tobacco. Too much tobacco comes to market that bears inspection, but because of too early packing, it goes through a sweat and acquires a bad smell, if not worse, before it reaches the buyers over the water, and then comes complaints and reduction of prices. Buyers say, "we can't trust your tobacco, it does not sample *there* as *here*, and we will not give therefore, so much for it as we would, if we were sure it was all right."

This month often proves the most favorable for making tobacco beds. If the land comes in nice order, sow your seed on, we need scarcely say, well prepared, highly fertilized land—400 to 500 lbs. of best Premium Guano to the acre, half worked in at the second chopping and the other half at the last dressing of the bed with hoes and rakes ready for the seed. Sow more land in seed than you can possibly want, if the beds should prove successful, so as to guard against the casualties of bad seasons, flies and other enemies of the plant.

TOP-DRESSING TOBACCO BEDS.

As soon as the plants appear well up, and once or twice afterward as they advance in growth, give the beds a dressing of 2 parts fire mould from the woods, 2 parts pigeon-house manure, 1 part plaster, 1 part ashes, and all the soot you can get from the farm houses, up to at least 1 part of the mixture. Thoroughly manipulate and intermix these ingredients—apply before a rain. Charcoal dust is a nice dressing for very young plants, it attracts the rays of the sun and generates heat, owing to its color.

OLD PASTURES.

Give these a dressing right away of a bushel of plaster and three of salt per acre; keep the stock off until May and you will reap your reward, they will save your first year's clover from being turned on too soon. This dressing will bring up the white clover and other natural grasses, and if the land be in good heart the pasture may prove a fine one. Clover fields may now be dressed with plaster—it is as good or better time than any.

UTENSILS AND FERTILIZERS.

This is the time to lay in all utensils that are likely to be wanted during the year; also such fertilizers as you may desire to use. You have more time to make careful and judicious selections of the articles you want than you may have late in the season. Buy your grass seeds and plaster and

get some "fish scrap" or other nitrogenous matter to incorporate in your manure and compost heaps. It is cheap and well repays the cost. When you have these things at home, they will be awaiting the crops and not the crops waiting for the utensils or manures.

MANURE HEAPS AND MANURING.

Embrace every opportunity to add to the bulk and richness of the manure piles and compost heaps. Nothing comes amiss, and the more the mixture and by frequent turning the more intimately it is mixed, the better, plaster, slacked lime, contents of house-buckets, soap suds, soot, ashes of every sort, sweepings of the barn and poultry yard, and even sods or road scrapings. The barn yard manure may now be hauled out, if the ground be not too soft, on the grass field intended for cultivation in 1875, or for fallow-wheat this autumn. The coarsest and least decomposed portion of the barn-yard manure should be spread very thick on the knolls and bare places and the finer manure thinly spread over the best places of the field. We have for thirty odd years been the strong advocate of top-dressing, having seen often and experienced its happy effects.

POULTRY.

Give the best attention to your poultry of all kinds, and see that you have a large stock on hand, for it is one of the most profitable of the small industries on a farm. Most fowls begin by the 14th, or Valentine's Day to lay eggs in earnest, and many are ready for incubation. Ducks and Geese will lay many eggs this month. Let your poultry have a plenty and a variety of food, and a large range during a portion of each day, and access, if possible, to newly plowed ground. The aquatic fowls would be much benefited by frequent access to a deep stream or pond of water, where they could sport and mate.

BARLEY.

Barley may be sown this month. It seems strange more of this grain is not grown in this section; soil and climate are favorable—it generally yields more than rye and brings a larger price. It is always in demand, especially now that beer is drank in such enormous quantities. A large amount of Barley is imported to supply the demands of the business of malt liquors.

GRAPE VINES.—Trim and tie up the grape-vines, if it was not done last fall. Mulch them with coal ashes—we have found it act well—it keeps the grass down and the grape roots cool and moist.

Common ley of wood-ashes will soften hard putty in a few minutes.

GARDEN WORK.

There is not a great deal of work to be done in most country gardens this month, and none, unless the weather permits, and the ground gets in order. If our advice last autumn was followed as to manuring heavily and spading deeply the beds, leaving them in the rough without being raked, and having had a dusting of lime, or plaster and salt, they are in a fine condition now for the reception of seed as soon as the ground is dry enough to receive a dressing off with the hoe and rake. Hot beds and cold frames require much attention this month as the sun is powerful some days and the weather liable to changes, they must therefore be watched and guarded against the vacillations of the elements. Give all the air possible, so as to harden the plants. Work the lettuce in the cold beds and draw the earth around the plants to encourage early heading.

PEAS.

If the weather is fine sow a few rows of Peas, they will stand considerable frost, but sow deeper, say four inches, than you would later in the season. Lay two narrow boards over each row, that when they come up, the planks may at night and during cold weather be set over the pea row in the form of the letter A reversed. They do not require very rich soil. A light thin soil with a sprinkling of leached ashes or bone meal in the rows is best for peas.

BEEETS, PARSNIPS AND CARROTS,

May all be sown this month. The soil should be rich and deeply worked, to allow these voracious roots to feed well and penetrate without obstruction as far as they will.

ONIONS.

For seed, if not set out last fall should be now, and onion seed sown now will make fine table onions next Summer. The sets may be planted later.

SPINACH.

Sow a bed with spinach on a southern aspect with a north protection, cover with straw or brush. The bed cannot be made too rich for this delicious vegetable to grow succulent and possess in the highest degree its healthful, medicinal qualities. It is beyond doubt the most wholesome of all our early vegetables. Jowl and spinach is a dish for a king, though the poorest laborer in our land may daily enjoy it at small cost of his labor and time.

CURRANTS AND GOOSEBERRIES AND SUCH SMALL FRUITS

May be pruned, worked and mulched with coarse table manure.

For the Maryland Farmer.

OPEN DITCHES AND UNDERDRAINING.

CHAPTER ONE.

It is very evident that there are still not a few farmers in some districts of this country, who do not really understand the advantage of underdraining over surface draining; and there are also a larger number who do not understand how to properly locate and construct surface ditches.

There is a limit to the substitution of underdrains, for surface ditches. The latter are necessary, to a greater or lesser extent, in conjunction with every efficient job of underdraining. They are required in the lowest portion of all drained tracts of considerable area, as a place of general discharge of lateral underdrains, and to receive and remove surface water in times of rain fall in excess of the capacity of the soil to absorb, and convey away through the medium of the underdrain.

The open ditch for these purposes, should not only be located in the lowest portion of the tract to be drained; but it should be as near straight as is practicable. If crooked the flow of water in passing through a curve, in its natural tendency to flow in a right line, strikes a concave bank with a force that will undermine it, and cause it to cave into the stream, which will convey it to a place where the fall in the ditch is slight, where it will be deposited in the bed of the ditch, which it is liable to fill in time to an extent that the banks will be overflowed, and the water frequently makes for itself a new channel, which is generally circuitous, and if the surface is in tillage, it is liable to produce serious damage.

A heavy fall in such open ditches is not desirable, but the natural fall of the lowest portion of the ravine in the direction of the axis of the ditch is generally the only available location for the ditch. When the fall is so great that the bed of the ditch is inclined to wash, such tendency is prevented most economically by paving a portion of the bed of the ditch with stones. In addition to this precaution, it is often judicious to sod a belt on each side of the pavement. The width of the pavement, also that of the belt of sod on either side of it required, can only be determined correctly by a skilled, draining engineer, who will study the extent of the water shed that the ditch is to receive and conduct the water from, and will give it proportionate capacity.

The largest experience, and greatest skill, not unfrequently proves inadequate to the task of deciding correctly what dimensions will be required

in water conduits; and the fear of incurring too great expense in the execution, results in a lack of required capacity very generally.

THE BANKS.

The banks of the open ditch should have a very gentle slope: thirty degrees, as a rule, is preferable to a greater steepness.

The excavated material should never be deposited and allowed to remain on the margins of the ditch, for two important reasons, viz: the incumbent weight of such deposit on, or near the bank, is inclined to crush it in, particularly when it is saturated and softened, in time of high water; and such raised dikes on the margin of the stream, prevents the regular and uniform flow of surface water into the stream, and by thus confining it, concentrates it, to a point of escape so contracted, that it is liable to destroy the bank and fill the stream with debris that will interrupt the flow of the water, and cause further damage.

THE PROPER DEPTH OF THE OPEN DITCH.

When lateral underdrains are to be discharged into an open ditch, it should be at least six inches lower than the mouths of said drains, and unless the fall in the ditch is so great that the water carries the debris with it, even a greater depth below the side drains is preferable, that the silt may not collect in the mouths of the underdrains and destroy them; a very common occurrence, and one from which the efficiency of underdrains is impaired to a greater extent than perhaps from all other causes combined.

DISCHARGE OF UNDERDRAINS.

I have found great economy in the use of one joint of iron pipe at the mouths of underdrains, whatever material the drains may be constructed of; as the pipe, which should be at least four feet in length, is not as liable to clog as a culvert mouth of a stone drain, and such a pipe is not as liable to be broken, or displaced as short earthenware tiles. The pipe discharging the water from an underdrain into an open ditch should extend well out into the bed of the stream, and should "look" obliquely down stream, as the flowing water passing the end of the pipe, discharging obliquely with the axis of the stream, will carry the silt with it, and thus prevent its accumulation in the pipe.

CONVENIENCE OF SLOPING DITCH BANKS.

If the banks of a ditch are well sloped, they are more readily swarded over, and maintain themselves better, besides the advantages above mentioned; and when so constructed, they admit of crossing at any point with mower, rake, tedder, and farm vehicles—the great convenience of which needs no comment.

TIME FOR DRAINING AND DITCHING.

The execution of both open ditches and under-drains is more economically performed in times of very low water, and the drought is favorable for distinguishing the wet weather, from the perennial springs.

The hauling and grading of material excavated, also the material used as drainage, pavements, sodding, &c., may be done at much less cost, and with greater convenience in a dry, than in a wet condition of the soil.

Still another advantage of the dry time and low water, is in case the underdrain water is to be utilized as described on page 361 of the Dec'r No of the "Farmer" for 1873.

I will call special attention to said article, for I feel that I have made no discovery, or invention connected with draining so valuable as that pertaining to utilizing underdrain water.

This article will be followed by one on the detail of the construction of open ditches and under-drains; and all the various kinds of material used in draining.

J. WILKINSON,

*Rural Architect, Landscape Gardener and
Consulting Agriculturist, Baltimore, Md.*

YIELD OF CHEESE PER COW.

We find among our exchanges the following interesting statement, which is relied on as authentic, as to the profits of cheese-making. It will be of particular interest and value to those contemplating going into the cheese factory business, or making it one of the home-industries, which in Europe is found to be an important and very profitable adjunct to the annual income of the farm, often proving the only source of support the farmer has left for his family after paying his laborers and his landlord. Our climate; abundance and richness of our grasses, and length of the grass season; high prices of cheese and pork (which is a part of the profits of cheese-making) it would seem, ought to tempt capital, individual or associated, into this recompensing enterprise. We have heretofore shown how it would materially, in various ways, help the rich man as well as the poor man; the lady with her twenty cows as well as the lone widow with one cow:

Year.	Factory returns from N. Y. State.	No. cows represented.	Av. yield cured cheese per cow.
1864	35	19,270	266 lbs.
1866	26	13,402	316 "
1867	27	12,238	291 "
1868	22	11,654	255 "
1869	35	17,954	334 "
1870	22	14,381	304 "
1871	20	11,348	300 "
1872	21	13,218	331 "

Total, 8 years, 207 113,468

Average yield per cow, 310 pounds cured cheese.

Prepared for the Maryland Farmer.

MEETING OF POTOMAC FRUIT GROWERS.

This flourishing and really useful Society, made up of Fruit Growers in Maryland, Virginia and District of Columbia, held its January meeting in Washington, D. C., on the 6th January, which was an enjoyable and well attended gathering.

President Gillingham being absent Vice President King took the chair, with P. H. Folsom, Secretary.

After reference to minutes of past meeting, the Society proceeded to election of officers for the year, which resulted in the choice of the following:

President—Chalkley Gillingham.

1st Vice President—S. E. Chamberlain.

2nd Vice President—L. A. Hopkins.

Secretary—P. H. Folsom.

Treasurer—N. W. Pierson.

Executive Committee—William Saunders, J. H. King, D. O. Munson, John Saul, and J. H. Gray.

D. O. Munson, Stacy Snowdon, and Col. Chamberlain placed on the table splendid displays of several varieties of well preserved apples, which were tested and enjoyed by the members.

S. E. Clark presented some strawberry tomatoes, or ground cherries, as sometimes called, well preserved, and recommended as worth cultivating.

J. L. Smith explained his mode of raising fruit trees from cuttings, and presented specimens.

Maj. King exhibited a new patent corn planter, which he recommended.

Guy Thompson of Md. was elected a new member of the Society.

On motion, a committee of five was appointed by the Chair to report amendments to the constitution, and report at next meeting.

Dr. Howland moved that the constitution and by-laws be read at the meeting, which was passed.

The following were appointed committee on the constitution and by-laws:

P. H. Folsom, S. E. Clarke, J. S. Snodgrass, S. E. Chamberlain and G. F. Needham.

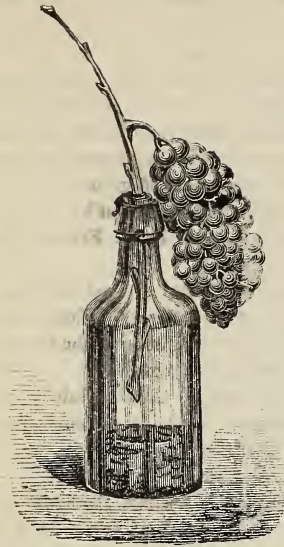
After discussion on financial affairs, and some business, the Society adjourned till the first Tuesday in February.

This Association is doing much good, and is rapidly taking rank with any similar Society in the country.

LAND MARK.

If you wish to make a nail drive easily and last long without rusting, dip it in melted grease first. This is excellent for fencing and other exposed work.

NEW METHOD OF PRESERVING GRAPES.



A French vine-dresser preserves grapes through the entire winter, their freshness, beauty, and savor remaining unimpaired, even until the month of April. He for a long time kept secret the process, but has lately given it to the world. The grapes are left upon the vine as late as possible, care being had, however, to cut them before the first frost. The bunch, in cutting, is not detached from the stalk or cane, but the latter is cut so that the cluster has attached to it, after cutting, two or three knots and joints below the cluster and two above. The upper end is then covered with wax, to prevent the evaporation of the fluids contained within the pores of the wood. All grapes, not absolutely healthy, are carefully removed from the cluster, after which the lower end of the stock is thrust through the hole in a perforated cork, and down into a bottle filled with water. In the water is a little wood-charcoal, which prevents it from becoming impure. The cork is crowded into the mouth of the bottle as closely as possible, and then covered with sealing wax around the stalk, so as to close the bottle, water and air tight. The bottles are then placed upon tables or shelves in a dry chamber, in which the temperature never falls below the freezing point. The bottles are supported in any convenient way, so as to prevent their being tipped

over by the weight of the clusters, and are placed at such intervals that the bunches do not come in contact with each other. The bunches must be, from time to time, carefully examined, and such single grapes as show symptoms of spoiling, must be removed.

The accompanying engraving illustrates the method, for which we are indebted to the *American Artisan* and Illustrated Journal of Popular Science, published in New York by Brown & Allen, at \$2 per annum, a first class monthly devoted to Art, Science, Mechanics, Chemistry, inventions and patents. The literary character of the *Artisan* appears to be commensurate with its typographical excellence.

LARGE YIELD OF CORN.

In our last we alluded to the large crop of corn raised by J. W. Dickey, of West Alexander, Pa.; the following is the report of the committee giving the method of culture, yield, &c:—

The field was in sod eighteen years; was formerly rather poor, but had been pastured with sheep the above mentioned time. It was plowed early as the frost would allow at an average depth of two and a half to three inches deep. It was harrowed six times over just before planting; marked in rows each way, two feet five inches, by three feet one inch, and the average number of stalks per hill was three and a half. The corn was planted about April 20th. When the corn was coming up the field was harrowed over with a common harrow. After this the three-shovel cultivator was used, then the double shovel, and for the last time the single shovel plow; twice in a row each working; in all it was worked five times. At the last working the corn was up to horse's back. There were by actual count 1,104 shocks of corn, which the committee found to average two bushels, one peck, one quart and one pint of shelled corn to each shock; in all

2,535 $\frac{3}{4}$ bushels of corn, or one hundred and sixty-nine bushels of shelled corn per acre!"

Mr. Dickey claims that by shallow plowing of fields that have been long in sod, the corn is brought into immediate contact with the most nutritious parts of the soil and is forced to grow rapidly. He also says the cut worms feed upon the grasses, which are near the surface where the worms can get at them, leaving the corn to grow undisturbed. His neighbors who plowed deep, had to replant much of their corn, on account of the ravages of the cut worm. Mr. D. keeps over nine hundred sheep, and to them he ascribes the fertility of his soil. His sheep averaged him last spring over six pounds of wool per head, and the committee reports them as all fit for mutton.

PRESERVATION OF WOOD.—A simple but effective method of protecting wood from decay is to immerse it in salt water. In Holland, the ship builders immerse their timber for sometime in sea water before sawing it in the mill. It has also been found that wooden piles driven in the sand of salt marshes last for an unlimited time. In the salt mines of Hungary and Poland the galleries are supported by wooden pillars, which last unimpaired for ages, in consequence of their having become saturated with the salt.

For the Maryland Farmer.

AN ITINERANT AGRICULTURAL COLLEGE.

With the view of disseminating scientific knowledge more extensively amongst our agricultural population and placing within the reach of almost every one its inestimable advantages, I suggest for consideration the following plan, which I think might be made available to that end.

Let the Trustees of the Agricultural College appoint an auxiliary set of three Lecturers, whose duty it shall be to travel a given circuit and lecture every night (or afternoon as may be convenient.)

Three lecturers, following each other in regular order, could thus serve *six places three times a week*, each one lecturing upon a *different* subject. Suppose, for example, the following schedule, the lectures to be upon Chemistry, Natural Philosophy and Botany.

Place	A.	B.	C.	D.	E.	F.
Days.						
Mon.	Chem.		Botany		Nat.Ph	
Tues.		Chem.		Botany		Nat.Ph
Wed.	Nat.Ph		Chem.		Botany	
Thur.		Nat.Ph		Chem.		Botany
Fri.	Botany		Nat.Ph		Chem.	
Sat.		Botany		Nat.Ph		Chem.

This schedule can of course be *varied* as to *subjects, times or places*. A course of fifteen or twenty lectures on each subject, would occupy the entire season, commencing in October and ending in February or March.

Let these lectures be made as practical as possible, illustrations of Botany, Geology, &c., taken from the *immediate locality*; a *course of reading* upon the *subjects* of the lectures, should be recommended, and suitable *text-books named*; this is, in fact, indispensably necessary in order that the full benefit of the lectures be obtained.

For the *execution* of this plan, let the Farmers in a given district *take the initiative* in the matter; call a meeting, and *ascertain* if the expenses attending such a course can be met. Suppose at each of the six districts an *average* number of only one hundred tickets are sold, at *five dollars* each, the amount so raised would be \$3,000. The expenses, Hall rent, light, fuel, janitor or doorkeeper, printing and advertising, and sundries, would not probably exceed \$1,000, leaving \$2,000 for compensation of lecturers, say for four months, or equal to a salary of \$2,000 per annum, which ought to secure the services of competent lecturers. If it is ascertained that these expenses *can* be met,

then let them proceed to a permanent organization, electing the necessary officers, adopting and *subscribing* to a *written* constitution or *agreement* to carry out their views. There should be a *general* committee of finance, and *local* committees at *each station* to procure a Hall and see that it is properly lighted, warmed, doorkeeper and *ushers* appointed, to see that the *audience* is properly *seated* and that *order* is maintained.

A committee should also be appointed upon lectures, who should provide proper assistance for him in his lectures, &c.

To ensure punctuality in the delivery of the lectures, these details should be *carefully* and *promptly* attended to, and would not be burdensome if properly distributed among committees.

The tickets should admit a gentleman and two or three ladies, *strangers* visiting the neighborhood should be tendered complimentary tickets. I think if some of our young farmers would take hold of a scheme like this they could do a large amount of good and spend many happy hours together.

All the arrangements for such a course of lectures should be made and entirely completed during the summer months, so that the lecture season should be commenced promptly, and work smoothly from the start.

I have suggested that the trustees of the Agricultural College appoint these lecturers, because from the position they occupy they have a *better chance* to select suitable persons, and the *responsibility* of the lecturers to that institution would ensure a proper discharge of their duties, and in case of a default in any manner a proper remedy could be supplied with more promptness than by the general association. The College could also furnish instruments for illustration and aid the lecturers in many ways they might not think proper to offer to an independent corps of lecturers. I have named only *one set* of lecturers for the purpose of illustration, but it is obvious that any number of such circuits may be in operation at the same time.

BAD MILK AND BUTTER IN WINTER.—It is said that when cows are allowed to eat litter which is thrown out of horse stables, impregnated as it is with liquid manure, their milk and butter will be tainted with the taste, in the same way that the flavor is injured by eating turnips, but to a more disagreeable degree. If litter is allowed to be eaten, it should be only given to other cattle, and not to milch cows, which should have nothing but the sweetest and purest food.

They still advertise for "a good girl to cook,"

HOW GREAT PRICES CAN BE PAID FOR CATTLE.

It is often asked by the practical man, who thinks \$100 a high figure for a calf, though its ancestor may have cost \$5000 to get him from England, beside the risk, how men can afford to pay \$5000 to \$40,000 for an animal? And the more sceptical, who never suffer their minds to go out of the groove that their grandfathers used to run in, and who deprecate surely a chimerical notion as progressive agriculture, deny that only such prices have ever been paid;—that it is all a collusion between the buyer and seller to gull the foolish and cheat the innocent green-horn. The following extracts from that superior weekly "The Turf, Field and Farm," will show enormous prices paid for animals, and how the purchaser was justified in paying such amounts. If those who still cling to old customs and scorn high-farming, or which is in truth only progressive farming, will only reflect upon the facts set forth in these paragraphs and profit by them, they would soon see their neighborhoods stocked with improved breeds of cattle each one worth in money value five times that of one of their present stock of curly headed, shad-bellied, stumptailed runts. There is one other important fact also disclosed, which we ask attention because, it, confirms what we have often in the pages of this journal advocated. The plan of association in a neighborhood, in buying improved animals and letting their services for a reasonable sum, thus getting rid of the herd of worthless male animals; preventing a continuance of the propagation of the runts and gradually infusing an improved blood, until the entire stock will be highly advanced, when the improvement and the gains would be so apparent, there would no longer be any obstacle in the way of continued progress. Then our enterprising breeders of stock would no longer fear that accident might let in, his neighbors \$15 old-fielder, among his high bred heifers worth \$1,000 each, or his \$100 South Down Ewe be tupped by Mr. Smith's old black ram, that he keeps to make mixed colored yarn for his stockings. But, to the extracts:

The fine young bull, 2d Duke of Oneida, calved August, 1870, by the 4th Duke of Geneva, dam the 13th Duchess of Thorndale, purchased at the late sale of the New York Mills herd by T. J. McGibbon, of Harrison County, Ky., at the price of \$12,000, is likely to prove a good investment. His services are engaged for sixty females at \$200 each, or to the sum of \$12,000, the price paid for him. Many predicted that Mr. McGibbon would never realize the purchase money out of him. Should the bull live to a reasonable age, he will prove a valuable investment,

Mr. George M. Bedford, of Bourbon County, Ky., sold last summer to George Murray, of Wisconsin, the short horn bull, 11th Duke of Geneva, for \$10,000. This was then considered a very high price. Mr. Murray has a standing offer of \$16,000 for him from an English breeder. This is the highest price ever offered for a bull.

Translated from the French.

AGRICULTURAL CLUB OF THE LAMB OF GOLD.

(Our readers will remember that we have heretofore translated the proceedings of this club for their benefit, and we now give the origin of the name as we find it in the *La semaine Agricole*, Montreal.)

A few years ago, twelve cultivators, residing in the 3d section of a certain parish, associated themselves to procure a sheep, for the reproduction of the Leicester race. Thanks to judicious crossing, the flocks of the 12 members in a short time became very valuable and carried off the 1st prizes in the exhibitions.

This improvement brought such profits that the sheep was called the "sheep of gold."

The 12 members, among whom, intimate relations were established, one day conceived the excellent idea of forming an agricultural club, regulations were adopted, and it was decided unanimously to name the association, "Agricultural Club of the Lamb of Gold." The following are the regulations:

1. This Club takes the name of the Lamb of Gold.
2. It shall be composed of the following 12 members:—
3. Two-thirds of the members shall be necessary to admit a new member.
4. The club shall hold a session every Sunday evening, at the residence of the President.
5. The President is elected at the end of each season, but the same person may be re-elected and occupy the chair more than one week.
6. The Secretary is elected for one year, at the first setting in January.
7. At the meetings of the club, members shall have the privilege of bringing with them their wives and grown children.
8. The Secretary shall keep the minutes of all the meetings.

So good an example merits imitators: on with the work, friends of progress. *

Dry paint is removed by dipping a swab with a handle in a strong solution of oxalic acid. It softens at once.

If there is rust on your flat-iron, or other roughness, put some fine salt on a board, rub it rapidly while warm until it moves smoothly.

SILK CULTURE.

The manufacture and cultivation of silk is beginning to occupy the attention of our people to a considerable extent. At a recent meeting of the Agricultural Society, held at Philadelphia, among other important business, Dr. Chamberlain, of that city, read a very able and carefully prepared essay upon "*Silk Culture* and its adaptability to a successful prosecution in this climate," from the discussion of which we give the following brief synopsis:—

"The silk culture is progressing in California. A large trade in silk worm eggs has been carried on there. Six hundred and seventy-five thousand dollars' worth of the eggs were brought there at one importation from China. The future of this trade was estimated by Hon. W. D. Kelley at thirty million dollars annually. The California Legislature encouraged it by premiums, which produced a multicaulis speculation to some extent. Individuals there still pursue the culture. Mr. Newman exhibited at San Francisco the feeding of three millions of worms in public, Mr. Brannan has one hundred acres of trees at Calistoga. Others have smaller plantations but are increasing them. Los Angeles, Sonoma, Nevada City and others are raising the eggs for export.

"The silk mills of Paterson, N. J., of Philadelphia, &c., grew out of the multicaulis speculation. So in California, they are erecting mills for silk weaving. The silk interest is becoming very large over the country. It has already reached forty million dollars of production.

"Dr. Chamberlain urged the society to encourage the planting of mulberry trees, and especially to use their influence with the railroads to get the mulberry planted as a shade tree at all their stations. He urged the very presence of the mulberry would induce the raising of silk."

A discussion then arose, growing out of the essay which engaged all the members who were present. Dr. Evans related in some detail the effort to introduce the culture into that State a few years ago, and the causes of its failure, alleging that the experiment was discouraged too soon, and that had it been developed further, would have ultimately led to success. He also declared the climate of this country is especially adapted for the growing of the mulberry and proved that silk culture had been profitably prosecuted in the early colonial days.

The President stated that seeds and cuttings could be secured from the south of France without much difficulty or expense. Dr. Emerson thought it would be a good idea to plant the mulberry in asylum grounds where the inmates of the institutions could gather the leaves. The following resolution was then adopted:

Resolved, That the thanks of the society be given to Dr. Chamberlain for his admirable essay upon

silk culture, and from the information contained therein it is evident that silk might be cultivated to great advantage in this State, and that we cordially recommend the consideration of the subject to kindred societies in the United States.

HORSES KILLED BY HYDROPHOBIA.

Mr. T. Lane Emory, residing near Taylor, in Bel Air county, Md., recently lost two valuable horses by hydrophobia. The first intimation he had that either of them had been bitten was while driving on the road. One of them began to act very strangely, frothed at the mouth, and becoming almost ungovernable, in a frantic rage seized its companion by the neck, tearing out a piece of flesh, thus communicating the disease to it. On Friday last the one first taken died, and a few days subsequently the other died also. A number of hogs in the neighborhood were also bitten by the same dog which is supposed to have bitten Mr. Emory's horse, and died with the same dreadful disease.

How long will our Legislators continue by non-legislation to indirectly protect the canine race, to the suppression of sheep-raising and the endangerment of the other classes of domestic, useful and valuable animals? How long will our law-makers in fear of losing popularity with a few vandals, hesitate to legislate, so as far as possible to protect their fellow-citizens, men, women and helpless children, from the most terrific and heart-rending deaths, to which they are ever liable, while the land is permitted to be swarmed with hungry, houseless, wandering curs, fice, and every conceivable mixture of worthless dog blood? It is a crying shame upon our humanity, upon our manhood, that this thing should be!

IMPORTANT IF TRUE.

If the figures 60 are divided by the cotton crop in millions of bales, the result will give the average price per pound at the nearest market. Thus the crop raised is

2 Million Bales	60	30 cents per lb.
3 " "	20	" " "
4 " "	15	" " "
5 " "	12	" " "

It will thus be seen that under ordinary circumstances, 3 million bales of cotton are as valuable to the planter, and will bring as much money as can be obtained for 4, or even 5 million bales.

A small crop is increased in value by speculation. A large crop is reduced in value by any disturbance of the money market, or by war, pestilence, or famine. The surplus land can be profitably occupied in producing pork, corn, and hay, without reducing the value of the cotton crop one dollar. Try it,—G. Allen's Circular,

THE OSIER WILLOW.

A. V. Wallace, of East Pike, New York, writing to "Our Home Journal and Rural Southland," New Orleans, on this subject, in relation to numerous enquiries made him, sends a paper which had been published by him in the Weekly *Tribune*, giving his experience in the business and answering the questions fully, as follows:—

ALL ABOUT BASKET WILLOW.

It is necessary that the Osier Willow be cut each year to be in the most perfect condition for use; it is equally essential that the annual growth be strong and vigorous to meet the wants of the manufacturer in all its variety of detail. At the same time that a large growth is obtained, it is easily understood that in a closely planted field the osiers will grow long and slender in their efforts to reach the light, and that the later shoots, not having an equal chance with the rest, will constitute about all that are considered desirable among the generality of willow workers.

A few years since there were imported some of the finer German varieties, specially adapted to the finer grades of basket work, among them *Salix purpurea* of good growth and inclined to stool out well, but all I believe have ceased to be favorites, giving way to the *Salix viminalis*, a variety of strong, rapid growth, and particularly adapted to this country. Some of its special points of excellence are, its roots very deep; the plants are not liable to crowd each other out; it will stand close planting; stools out well, and thrives without manure on land that has been impoverished by grain crops, yielding from two to five tons of green willows per acre, the willows, when properly peeled and dried, having a very white and clean appearance. While the willow is very hardy, and will grow almost anywhere where vegetation can exist, I find the land most specially adapted to it is muck, or made soil, that has received the drainage and wash from the higher surfaces. Such land should produce from four to five tons of green willows per acre. As the soil grows more wet the product will fall off until one or two tons would be a good yield from a surface covered with water from one to two months during the growing season. On dry, hilly and gravelly lands, with little depth of soil, and good natural drainage, the product is generally light, without fertilizers—from one to two tons of green willows.

The land should be deep plowed, and pulverized, and the sods and grass roots should be removed so far as possible. The cuttings should be eight inches in length, of well ripened wood, and set six inches deep, at an angle of forty-five degrees with the rows, the rows thirty inches apart, and the sets six inches in the rows. As the cuttings are not expensive, it is better to thus insure a good stand than to be to the trouble of resetting the next season. If the ground is dry enough, I prefer to cultivate some small crop, like beans, between the rows the first season, as it will keep down grass and weeds until the willows can get a start.

The first year the willows will amount to nothing for market, but must be cut just the same, as they will branch the second year if not so treated,

and spoil them from peeling. The second year a light crop of from one to two tons may be expected, and so on to the third and fourth years, when the willows will become well rooted, and produce as large crops as ever. Particular care should be used in cutting them close to the ground, as they will stool out better, and facilitate the subsequent cutting.

For peeling, the willows may be cut either in the fall, winter or spring; they may be peeled in the winter by steaming, and the crop find a market at a fair profit, but the process of steaming, gives them a dark-redish color, and injures their sale. When peeled in the spring, they should be tied up in bundles and set in water six inches in depth, and left until they commence to leaf out, or until the bark slips. They are then taken to a suitable building, and when peeled by hand are separately drawn through the jaws of an implement called a hand brake.

Some little judgment or experience is required to avoid crushing the smaller part of the willow, which is quite tender. A good hand will thus break from 1500 to 2000 pounds of large willow per day. The willow should be rinsed in water as soon as the bark is taken off, as the sap leaves a dark stain when allowed to dry on them. The willows are then stored in an airy place to dry, are then bound up, and are ready for market.

The willow seems to be almost the only crop that is proof against vicious insects or variable seasons, either hot or cold, wet or dry; they are about as sure to make a crop as the seasons are to come and go. There seems to be little reason why this country should import so many willows and articles fabricated from them, when their production, preparation for market, and manufacture, is so remunerative. One acre of suitable land will produce four tons of green willows. After peeling and drying they will have shrunk to one ton, which is worth, in the various markets of this country, from \$140 to \$200. When manufactured into the various articles for which it is adapted, the ton of willow is then worth from \$600 to \$1000. There is also very little loss or waste in working them up.

AVERAGE YIELD PER COW.—Mr. E. Lewis Sturtevant, of Waushakum farm, South Framingham, Massachusetts, has been over hauling dairy-men's reports, and other sources of information, for the purpose of settling the average annual yield of the native cow. He has sent his labors to the *Country Gentleman*, but the results are condensed in the following three conclusions:

1st. The average yield of the average cow in New York State, can not exceed annually 1,350 quarts.

2d. The average yield of superior dairies will not exceed 1,800 quarts.

3. The possible yield of superior dairies of the native cow can not exceed 2,300 quarts.

VINEYARDS IN CALIFORNIA.—California has 40,000 acres of land this year in vineyards, and they have produced 12,000,000 gallons of wine, 2,000,000 pounds of grapes for table use, and 350,000 pounds of raisins, besides the brandy, of which we have no statistics of the present year's yield.

MARYLAND STATE GRANGE.

In response to notice, by E. J. Ohr, Deputy of National Grange, for the State of Maryland, representatives from the several subordinate Granges, met in Eldon Hall, Baltimore, on Tuesday the 6th January, to form a State Grange of Patrons of Husbandry, for Maryland; an instructive opening Address was made by the general Deputy, and some preliminary business transacted, when the meeting adjourned till next morning.

On the morning of the second day the Masters and their wives, of the several Granges, again assembled, and the meeting was called to order by Deputy Ohr; after which the following officers were elected: Joseph T. Moore, Montgomery county, worthy master; Joseph M. Burr, Kent county, overseer; J. C. Harper, Talbot county, lecturer; J. B. Bonsail, Cecil county, steward; T. J. Iglehart Anne Arundel county, assistant steward; James Barlow, Howard county, chaplain; Jos. N. Chiswell, Frederick county, treasurer; Edward Hall, of B. Anne Arundel county, secretary; Wm. Hepbron, Kent county, gate keeper; Mrs. J. T. Moore, Montgomery county, Ceres; Mrs. J. C. Harper, Talbot county, Pomona; Mrs. J. C. Wilson, Montgomery county, flora, and Mrs. John Corry, Kent county, lady assistant steward. A portion of the day was then occupied in preparing rules and by-laws for the government of the association.

At night another meeting was held, at which the fifth degree was conferred, and the following resolutions adopted:

Whereas, every calling in the land has its members united in a common band by "association," "union" or "society" for its protection, we deem it right and proper that the farmers of Maryland should unite for their protection and their common good, wherefore this State Grange of the Order of Patrons of Husbandry has been formed; therefore, be it

Resolved, That the Order of the Patrons of Husbandry is not a woman's right association or a place for strong-minded women, but we recognize the equality of women with men by admitting them to a full membership in the Order.

Resolved, That we cordially invite all farmers to join with us in extending to themselves, their families, and their calling, the benefits of the order, and we recommend it to farmers of all classes as a bond of union stronger than armies, and an organization that will not conflict with their social, political or religious principles.

Resolved, That we favor equal and just taxation throughout the country, and we oppose the system of taxing the whole people for the benefit of enriching any class or classes of men, or for any system of industry whatever.

Resolved, That we demand justice and economy in the administration of the government and in the expenditure of the public moneys, and that the ex-

penses of carrying on the affairs of the nation be reduced to the lowest possible limit.

After the installation of the officers, Col. D. S. Curtiss, a general Deputy of the National Grange, being present, was invited to address the Grange, which he did, explaining the aims, objects, and results of the order—its efficacy to elevate the farming classes, and relieve them of many disadvantages under which they now labor; and enjoining upon them punctuality and fidelity to the Order and the Grange meetings, as the surest way of commending it to the favorable consideration of the public, which was received with applause and a vote of thanks returned.

After the transaction of some further business the Grange adjourned to meet again in March next.

SATISFACTORY FIGURES.

The *Journal of the Farm* gives the following figures concerning a farm of 321 acres, near Doylestown, Bucks Co., Pa.:

RECEIPTS.

From hay.....	\$4,385 57
Rye straw.....	403 78
Wheat.....	643 50
Rye.....	124 00
Potatoes.....	1,023 75
Dairy of thirty cows.....	2,427 50
Chickens.....	345 57
Turkeys.....	43 00
Ducks.....	50 40
Eggs.....	107 10
	<hr/> \$9,554 17

EXPENSES.

Manures.....	\$1,113 00
Ten tons meal.....	292 00
Four tons wheat bran.....	140 00
Four hundred bushels brewer's grain.....	88 00
Wages.....	1,137 96
Blacksmith work.....	237 40
Wheelwright work.....	121 75
Machinist bills.....	77 00
	<hr/> \$3,207 11
Receipts over expenses.....	\$6,347 06
Receipts per acre.....	19 77

The farm kept fifteen horses in addition to the dairy of thirty cows. But what is a little singular, there are no hog products in these figures.

Reckoning the farm and implements are worth \$200 per acre, the profit over and above the interest on \$64,200, and \$3,207.11 for expenses (as above) was \$1,853.06, certainly a very encouraging result.

HORSE SHOEING.—Never touch the bars, frog, sole or outer surface with a knife, or rasp. Shoe with light, thin shoes, that allow the sole, bars and frog to be brought in contact with the ground, and thus bear their due proportion of the horse's weight. Use small nails and not over five of them. Never allow the points to be driven high up the wall of the hoof. For ordinary service in the country during the summer months, use only tips, which protect the toe, but leave the entire ground surface of the foot unprotected.—*Murray.*

THE DAIRY.

LONG-TABLE TALK ON DAIRY MATTERS

TALK NO. I.

(We will imagine the gathering of the readers of the *Maryland Farmer* at the long table, the evening lamp lighted, the fire brightly burning, comfort within, the storm without, and the dairy editor in talking humor, who now makes his New-Year greeting to all with the earnest desire that prosperity, and the peace that maketh glad without it, may attend their pathways.)

As our object in these papers is to examine the necessary materials and conditions for the profitable manufacture of dairy products—milk, cream, butter, cheese—we will talk of the most important article in the list—the Cow—first.

As our conversation will extend over a period of twelve months, we expect to take each feature of the business in detail and examine it by itself, and we hope our hearers will not be impatient at the progress of our work or at the delay in investigating certain points upon which they may especially desire information, as we have the advantage however, of being together in one pleasant, social circle—we mean parallelogram—any questions upon the subject will be courteously received and considered.

The Cow on a Basis of Butter.

There are about nine million Milch Cows on farms in the country. The butter product (1870) was five hundred and fourteen millions of pounds: cheese, fifty-four millions of pounds. Multiply by ten—the pounds of milk for a pound of cheese and divide by 24, the pounds of milk for a pound of butter, and we have twenty-two millions of pounds of butter: two hundred and thirty-six millions of gallons of milk were sold; multiplied by eight (pounds to a gallon,) and divide by twenty-four and we have eighty millions of pounds of butter: that is the farm production.

The factories made one hundred and ten millions of pounds of cheese which reduced to butter gives forty-six millions of pounds: the factories produce other articles worth sixty-one thousand: this would buy, at twenty-five cents, two hundred and forty-four thousand pounds of butter: hence the grand total of dairy production for the farms of our whole country is equivalent to six hundred and fifty millions of pounds of butter, or less than eighty pounds per cow per annum: let us call it a hundred, and compare this with some cows we know and hear of, to see what the lesson will teach.

1. We knew of a cow a few miles from our farm

that gave sixteen pounds per week: at twelve and a-half pounds a week the yield for ten months would be five hundred pounds.

We do not know the breed of this cow but presume it was a native.

2. We had a native cow whose capacity we believe to have been five hundred pounds per annum: she gave eleven pounds per week on grass alone.

3. A cow (high grade, we do not know the strain of the high blood,) was exhibited at the last Iowa State Fair, which gave seventeen pounds of butter per week.

4. Another cow from Alderney, imported stock, gave seventeen pounds of butter in one week, averaged thirteen pounds for six months, and ten pounds per week the year around.

5. The record is at hand of another cow—this time a nearly full blooded Ayrshire—which averaged ninety-two pounds of milk per day for one week, over twenty-one pounds of butter, if we allow thirty pounds of milk—the average of milk for a pound of butter is twenty-five pounds—for a pound of butter.

6. We have the record of a herd of Jerseys on Long Island, which averaged for six months after calving thirteen pounds of butter per week.

7. During twelve months, another cow has averaged seven pounds of butter per week: this one was sired by a Durham bull.

8. A short horn cow (Durham,) gave in one week over fifteen pounds of butter: this was in Ohio.

9. A Jersey cow in Maine averaged eight pounds per week for a year.

10. The record of production of a herd of Jersey's (8) gives them ten pounds per week, per cow, for forty weeks.

11. We have now an account of a herd of one hundred and thirty-five cows, which give seven pounds per head per week for ten months in the year.

12. Two more cows gave ten pounds each per week for eight months.

13. A cross of Ayrshire and Durham blood has given eight pounds per week for months.

14. A New Jersey cow has made fourteen pounds of butter per week.

15. A New York grade, Devon, has made ten pounds of butter a week for nine months, on pasture alone, during grass season.

16. Thomas Bates' first Duchess cow gave eighteen pounds of butter in a week.

17. The Jersey cow, Flora, averaged ten pounds a week for the year.

18. We have a report of the Jersey bull Beverly, whose stock for successive generations yielded fourteen pounds of butter per week and held out well.

19. Col. Jenkins (Dunmore,) Jersey cow Minnie gives thirteen pounds of butter a week.

20. S. G. Livermore, of Benson county, Iowa, has a cow which gave one and seven-tenths pounds of butter a day for eighty consecutive days.

We cannot make any discount on the force of these statements on the ground of incredulity: we have the record and presume it is substantially true. We see that the blood of these fine milkers is native, Durham, Ayrshire, Jersey and Devon; hence there are commendable butter-producing qualities in those breeds; we may say in all breeds.

Now, what makes the difference between the production above given of three to five times the average production of the country?

Undoubtedly the character and the care of the stock employed: the care exercises great influence in the product of a dairy, but we find some of these cows had nothing to eat but grass, and we know but few relatively of the ordinary cows on equally good pasture would equal these figures: this is the experience, we do not doubt, of every dairyman: the breed is *not* in the feed box.

Hence the poor character of the common cow accounts mostly for this difference in production and the question comes up, how can we improve it? Let us look at the record of No. 18 in the above list.

"The stock of the Jersey bull Beverly has yielded fourteen pounds of butter a week for successive generations."

Have we any such record of productiveness from any native stock?

If we breed from this fence corner stock for sires without habitation, name or *literature*, are we certain of improving our stock, even if we select the very best of the native stock for dams?

If we were sure of impressing the progeny of our best native stock with its characteristics, we should want nothing better, or rather could get nothing better from the improved breeds: but we may raise a cross of one of these good natives with a common bull and find years of labor repaid with an inferior animal.

Necessity of a Good Thoroughbred Bull.

These reflections bring us to this starting point in improvement: get a thoroughbred bull of a good family and you are sure of improvement from the start: we are aware there is a great deal of very poor stock which is thoroughbred, but good breeders send these animals to the butcher: a breeder who values reputation more than dollars will be careful what he sells, and we know it is the practice to send poor stock, although thoroughbred, to slaughter: hence the necessity of caution in buying, particularly when we consider the great value

at stake in the purchase: hence one hundred dollars is not too much to pay for a bull calf of *the right kind*. The next question that comes up is

Will it Pay to Buy Thoroughbred Cows?

Let us look at the figures.

We had a splendid herd-book cow that makes thirteen pounds of butter a week, offered to us a short time ago for three hundred dollars. The calf would bring one hundred dollars when thirty days old: allow sixty days more out of the year for recuperation for ensuing burdens and we have nine months left: at the rate of production given we have four hundred and fifty pounds of butter: the account would stand

Calf	\$100
Four hundred and fifty lbs. Butter at 50 cts. lb.	225
Total	325

There are items of skimmed milk, feed, attention and manure which enter into the account, but as they would vary in different sections, they can be calculated accordingly: fifty cents is not too much for such butter: it will bring seventy-five in some sections: it is selling in some places for one dollar and twenty-five cents.

On the Other Side.

We have the cost of the common cow	\$30
Calf	8
100 lbs. Butter at 25 cts the average	25

Make the calculation for say eight years of the cows life (from four to twelve) and with the figures which would be correct in your respective sections for price of cows, butter, calves, feed, the attention and the value of the manure, and other products of the animal, and—be governed by the result: our figures however, indicate more profit in one good cow such as we have mentioned than in ten of the ordinary cows of the country. Our object is to direct thought to the subject of thoroughbreds, and leave the question with each locality for decision: a question comes up from one part of our table, what breed can we rely upon most confidently for these large results? which we will talk about in the future. *

WELL-WATER FOR PRESERVING BUTTER

As some of our readers have wells but not springs, they may use them for preserving their butter. Butter in a print of half a pound has been known to keep 15 years in the bottom of a well without any covering or protection whatever.

First pack the butter in a perfectly tight water proof vessel, which should be of white oak, or the heart of white ash, (other woods affect the flavor of the butter.) filled with hot brine made of clean water and clean salt, and soaked at least 24 hours before any butter is put into it: use a hard wood pes-

tle, or maul of four or five pound weight to press it down, the object being to exclude as much air as possible; use only the fine prepared dairy salt in packing, and salt to suit the taste of the parties you expect to buy it, whether it is one or two ounces to the pound; a good rule to begin with is an ounce to a pound after the tub or firkin is full, cover with a thin piece of muslin, put a layer of salt on this; cover securely.

If the butter milk is all worked out and the butter properly packed, the vessel may be put into a well or tank of cold water and kept—till wanted.

*

Translated from the French.

CONSUMPTION AND PRODUCTION OF THE COW.

The quantity of nutrition which a cow of medium size requires has been calculated—that which she appropriates for her own nutrition and that which is employed for the formation of milk. This solution having a certain importance in rural economy has occupied much of the attention of agriculturists, and the following are the results obtained:

A cow weighing 300 lbs. eats per day 3 lbs. of hay and 8 lbs. of other fodder or vegetables, making a total of 11 lbs., and she produces in milk, per day, $2\frac{1}{2}$ lbs.

A cow weighing 400 lbs. eats per day 6 lbs. of hay and 8 lbs. of other fodder, total 14 lbs., and she produces $3\frac{1}{2}$ lbs.

If she weighs 500 or 600 lbs. in the first case she consumes per day 10 lbs. of hay and 8 lbs. of other fodder, 18 lbs. in all; in the second, 15 lbs. of hay and 8 of fodder, 23 lbs. in all. The first produces 4 lbs. the second $5\frac{1}{2}$ lbs.

These comparative experiments are of much importance for farmers to form an estimate of the products which a cow can furnish.

*

CHEESE DAIRY—FRUIT CANNING, &c.

To the Editors of the Maryland Farmer:

I have read your productions in *Maryland Farmer* for some years with pleasure, and I think some profit. I note your remarks in the December number of the success of cheese dairying. I have had my mind directed that way for some years—our immediate vicinity would be an admirable location for such an enterprise, but our people, while they have the facilities to keep such an establishment going have not the means of starting it; and further, they know nothing about such work, therefore while they would be ready and useful helpers can not be leaders in such an enterprise. During

the summer season there is enough milk given to pigs in an area of 10 miles to help largely to support a Cheese Dairy, and the country has capacity to raise five or ten times as much if there was a market for it. Our people, though the war left them very poor and the failure in the crops have retarded their success, are very much improved—they are generally an industrious and frugal people, kind and hospitable to a fault—if such can be—but we are thinly settled, most of us have more land than we can work, and are willing to divide our farms and improve the remainder. We very much need among us industrious mechanics, as well as farmers, carpenters, blacksmiths, shoemakers, and in fact, any good mechanic will do well here, as he could buy a house very cheap. I must tell you of one from your city, a live man, who came to our village on Friday evening with no house to work in, and on Monday evening following had a building of sufficient size to commence canning green fruit, and went to work that day both in canning fruit and building, and continued operations till his large house was done; he packed very large quantities of cherries, blackberries, and all small fruits, till peaches and tomatoes were ripe, then he had more than his large number of hands could do, and during the fruit season paid out thousands of dollars for what had heretofore been almost worthless to our people; and better still, to all appearance, notwithstanding the panic, he saved several thousand net profits, and withal, whoever buys his fruit, owing to their superiority, will want more, as it was taken fresh from the vine or tree and sealed up that day. He tells me he had three cans out of about 100,000 to spoil, thus you see we have a fine opening for nurserymen and fruit raisers, this being a fixed institution in this village it must grow very rapid, and so it would be with the Cheese Dairy, or any industry that is suited to the country. We want men of small capital or large—prefer the former in large numbers—will give them a hearty welcome and a wide field for success, which would be certain, if properly directed. The crop of our county was moderately fair, all things considered; our people are hopeful, and prospects good.

OBSERVER.

Dunnsville, Essex County, Va.

A LARGE CHEESE FACTORY.

The Boston Cheese Factory has 700 cows, yielding an average of 9,000 pounds of milk daily, from which twenty-seven to thirty cheeses, weighing about thirty pounds each, are made.

For the Maryland Farmer.

THE POTATO.

I believe that the potato is generally conceded to be a native of Peru and the mountains of Chili; and not far from the sea coast, where it may receive, and benefit by salt water breezes. How, and when, it first reached North America and the United States is less clearly demonstrated; but it appears, from history, that its original qualities were greatly improved, as an esculent vegetable, in the early days of the settlement of the United States, and that as early as 1586 Sir Walter Raleigh took it from Virginia to England, and from there it spread over the Eastern continent. At first it was not accepted as an article wholesome for food, and only worked its way into favor from Royal influence; but in less than three hundred years it has come to be one of, if not the, most important staple article of food for all classes; especially is it so with the millions of the poorer classes, and indeed so important is it that the table of the most luxurious is not considered fully supplied without the potato cooked in some form, daily. Nations watch the prospect and growth of the crop with interest, as upon its success or failure depend the destinies of immense numbers of the human family. No less than four times has pestilence and famine swept over Ireland in consequence of the failure of the potato crop. Being of such importance, as an article of food, is it any wonder that the prospects of the crop is watched, or that scientific men and practical agriculturists have directed their attention and energies to the improvement of the potato, and the discovery of the best method of its culture?

Culture.—At this time I propose to overlook many items of interest concerning the origin of new varieties, uses of, diseases, etc., of the potato, and offer a few hints concerning its culture; and in doing so I am fully aware that upon no question, in practical agriculture, do we find greater difference of opinion in practical details, than upon the best method of raising potatoes. The day is past when success, in this branch, is to be expected or had, from the partial culture of former days when "*any stupid fellow can raise potatoes*," but to the *thorough* culturist, careful in all its details, is the reward accorded in proportion as his labors are judiciously and skilfully applied.

Time to Plant.—All things considered, early planting is the best, by early planting I mean soon as the ground can be well worked, and before corn planting time in spring. The earlier in the season the potatoes get a good start the more likely to escape accidents, summer droughts, insects, etc., ex-

ceptional seasons will occur when later planting will better succeed.

Soil.—The better and newer the ground and soil the better the crop, as a rule. The time is past when "any soil is good enough for potatoes," but instead, if we would have good eating table potatoes, the soil must be suitable, high, well drained, and not too moist. If we cannot have new, virgin, soil, take the best next afforded, such as has not been exhausted of mineral matters, and has a due proportion of vegetable matter incorporated therewith, but not in an active decomposing state. In this connection almost as much depends upon the preparation, plowing, etc., as upon the soil itself. It is better to plow the ground the season or fall previous, as a preparation, and if animal manure is to be applied, do it at this time, that it may become fully incorporated throughout the whole soil; fresh, animal manure should not be applied to the immediate crop. Plow again in spring just previous to planting, and at this time it will pay to subsoil where the subsoil is not of a loose or porous nature, and if thoroughly done little fear need be had from droughts or rain.

Manure.—If manure is to be applied at planting, mineral manures, guano, or like, are preferable. A mixture of ashes, plaster, salt and bones, makes one of the very best fertilizers for the potato, and you cannot very well come amiss in the proportions of their mixture, if you give the predominance to the wood ashes and they are from good hard wood.

Seed.—Good, specimen, medium sized potatoes, make the best, and these planted whole; next sets, or one-fourth potatoes, from the fairest and most perfect of table size, not the overgrown but the average, full matured, table size.

Hills or Drills.—Hill planting is the best. Plant in rows three-and-a-half feet apart and two-and-a-half feet in the row, for the average growth, some varieties require more, some less room, for their tops to expand. If whole potatoes are used put one to the hill, sets, two, unless very strong, when one is better; cover not less than three inches deep. Remember that the finer and more thoroughly the soil is worked and made the better for the crop.

GIARDINIERE.

POULTERER'S SUCCESS.—Miss Annie Kirk of Bethel, Pa., kept last year (1872) eighty fowls, Cochins and Brahmas, from which she cleared \$330 net. She fed from seven to ten bushels of corn per week to the old fowls, and cracked corn to the young chickens.

Riches cannot purchase mental endowment.

THE
MARYLAND FARMER,
A STANDARD MAGAZINE

EZRA WHITMAN,
Proprietor.

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Conducting Editor.

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Associate Editor.

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BALTIMORE.

T. C. DORSEY, Business Correspondent.

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Correspondent and Agent.

BALTIMORE, FEBRUARY 1, 1874.

TERMS OF SUBSCRIPTION.

One dollar and fifty cents per annum, in advance.
Five copies and more, one dollar each.

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Augustus L. Taveau.
John Feast,
John Wilkinson,
John F. Wolfinger,
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Robert Sinclair.

THE ROOMS
OF THE

Maryland Agricultural and Mechanical Association,

Are now open for the RECEPTION OF VISITORS, daily from 10 A. M. to 6 P. M.

Southwest corner of Fayette and Eutaw streets.

A. BOWIE DAVIS, *President.*

T. B. DORSEY, *Secretary.*

ACKNOWLEDGMENT.—We received with much pleasure from the veteran florist, *James Vick, Esq., Rochester, N. Y.,* a package of selected, assorted seeds, as a remembrance that we were not forgotten, for which we return our thanks.

THE AGRICULTURAL COLLEGE.

The Trustees of the Maryland Agricultural College held a meeting on January 17th at the State Normal School building, in Baltimore. There were present Allen Bowie Davis, Esq., President of the Board of Trustees; General Samuel Jones, President of the Faculty of the College; Colonel Earle, Colonel Lloyd, Professor Newell, Messrs. Ezra Whitman, J. Howard McHenry and Allen Dodge, Esq. President Davis submitted his annual report, giving a survey of the condition of the college in the past year. A copy of the report has been sent to Legislature and will be printed. The appointment of a Professor of Mathematics was spoken of, but although several names were presented no definite action was taken. The President of the Board of Trustees and the President of the Faculty were authorized to appoint a temporary Professor of Mathematics. It is expected that a small colony of English laborers will settle in the vicinity of the College. There are at present seventy-five pupils in this institution.

MARYLAND AGRICULTURAL AND MECHANICAL ASSOCIATION.

Since the new arrangements made by this Association, in providing a large room opened in this city where frequent meetings of the Society can be held for the discussion of various questions, delivering lectures and essays, meetings of committees; a place of daily resort for farmers visiting Baltimore; the formation of a library and a place of deposit for specimens of productions of the different counties of the State, there is no doubt, that the Society under the energetic and able management of the veteran farmer, its President, will become soon all that a State association should be.

These important matters ought to have been looked to from its formation. It will now become, we hope, by the publication of its Annual Transactions, equal to other State Societies, in disseminating useful knowledge, and advancing the progress of Agriculture. In another column will be found an account of a very interesting meeting held on January 15th last.

The Patrons of Husbandry, according to their latest reports, have 8,835 granges, with 662,725 members. There were 974 of the granges organized during November. The order is said to have received quite an impetus, from the favorable showing the granges have made in the autumn elections in the Western States.

EXHIBITION OF THE MARYLAND STATE
POULTRY ASSOCIATION.

The first exhibition of this association was inaugurated on January 1st, at Schwinn's Hall, Baltimore, and continued two days. The attendance was large composed of those interested in fancy breeds of chickens, pigeons and other birds—in all there were about 230 birds on exhibition, many of which were the finest ever exhibited in Maryland; there would probably have been a larger display but for the limited capacity of the hall. The display of pigeons was very fine, consisting of barbs, swallows, fantails, pouters, carriers, turbits, &c. A number of pigeon fanciers from Philadelphia visited the exhibition and expressed themselves as highly pleased. A large number of premiums were awarded to the several exhibitors.

A meeting of the association was held, when it was resolved that a committee be appointed to represent the body in the American Poultry Association which assembled at Buffalo, N. Y., on the 15th January, for the purpose of revising the standard of excellence in poultry.

The question of inviting the florists and fruit growers of Maryland and the District of Columbia to join the Maryland State Poultry Association in the work of inaugurating a grand horticultural, pomological and poultry exhibition, was also freely discussed, resulting in the secretary of the meeting being instructed to invite by circular co-operation in the matter from the fruit growers and florists of the State and of the District of Columbia.

BROWN LEGHORNS.—We notice our friend, F. J. Kinney, of Worcester, Mass., was awarded the first second and third premiums for Brown Leghorns, at the recent Poultry Show of the Western New York Poultry Society for cocks, hens, cockerels and pullets. This exhibition has been pronounced on all sides the finest the country has ever seen. It was held at Buffalo January 15th.

A VALUABLE IMPROVEMENT IN THE DAIRY OR MILK HOUSE.—We call the attention of our rural readers to an article by J. Wilkinson, Esq., our practical contributor, describing his improvement in Dairy Rooms, for which a patent is now pending.

A model of Mr. Wilkinson's improved dairy may be seen by those interested, by calling at our office.

Trying to do business without advertising is like winking at a pretty girl through a pair of green goggles. You know what you are doing, but nobody else does.

A single drop of the sequepede chloride of iron, put on a corn between the toes, once a day, with a camel's hair brush, will effect a marvelous cure.

LIVE FENCES.

J. P. J., Catlett Station, Va., wants to know if the extract from an article we found in the *Farmer's Club*, Oxford, Pa., is not calculated to mislead? And asks, if the hedges do not require the protection of a fence on both sides until it is fully established. And also whether the land has not to be well prepared for the plants and cultivated after planting.

Answer by the Editors.—We published the extract referred to only to show the comparative cost of the live and dead fence. In former volumes we have so repeatedly published full details as to the growing of Hedges, particularly the Osage Orange, that we thought it unnecessary to go over the same ground. As to preparation for and culture of the hedge, it is a trifling work. Turn five or six furrows on each side of the line of hedge, harrow well, run a straight furrow 6 or 8 inches deep, set in it 6 inches apart, the plants, cut same length, say 6 inches of root and two inches above the crown of the plant. Occasionally run a cultivator on both sides of the hedge, and prune severely twice a year for three years and the hedge is done, except annual trimming. As to protection, of course when very young, say the first year, it should not be allowed to be trespassed on. But we have seen it planted without protection and cattle nor sheep injured it. But with a fence on one side, and a crop on the other it would be safe, and it need only be planted as the different fields bounding on the outlines of the farm came in cultivation. The Osage is the best hedge plant. We would advise J. P. J., to plant only half an acre a year; this would give him good enclosures by the time his log fences will give out. The third year a hedge well attended to will turn most stock. We acknowledge, that upon a careful re-reading of the article in the *Farmer's Club*, it does appear to us that there are some inaccuracies in the estimates of cost of hedges. As to cost, D. J. Blackiston, at Massey's cross roads, Kent county, Md., "has an Osage hedge of five miles, the annual cost of trimming and keeping in order, being but \$26," and Mr. Stillman Stockwell, of Lyons, Iowa, in his *Essay on Osage Hedges*, page 112, vol. 8, (1871,) says: "The foregoing way of raising a hedge I have got by experience, and know if followed will be sure to make a live fence, that no kind of stock can pass, and the cost cannot exceed 20 cents per rod—my fence has not cost me 15 cents per rod."

If a door does not shut without a "slam," put a drop of sweet oil on the catch, or on the hinge, if it creaks soap will do, but not so well.

INSECTS IN FARM BARN.

To the Editors of the Maryland Farmer:

For the past two years I have been troubled with a fly and worm in my wheat in my barn. The fly is an ash colored one about the size of ones finger nail, the worm is say three-fourths inch long and has dark head, and cuts the wheat, and in due time webs up. These flies or worms run webs all over the sides of my grain bins to such an extent that they looked glossy and grayish in color, and is a great nuisance, as well as damaging to my wheat.

Would like to know of a sure remedy to get rid of these things, which you will give me through the Maryland Farmer at an early day.

Wheat looking well in this county owing in a measure to mild weather, although a good effort has been made, as well as a good deal of Fertilizer been used, to obtain a crop. A.

St. Michaels, Jan. 1874.

REPLY TO THE ABOVE.

It is not practicable to rid barns of weevils or worms and flies of the description of those mentioned by "A," until the contents is all removed, when all such destructive insects may be eradicated by thorough fumigation with sulphur: this however, cannot be effected without first making the building comparatively tight. In case the building is very open this is not easily done, but the ordinary cracks between the joints in the siding may be closed at small expense, by simply tempering pure clay with water, to the consistency of very soft putty, and in the use of the hands and a step-ladder, and the ordinary barn ladder, smear the cracks on the inside.

There are usually large openings between the plates and the sheathing of the roof, these may be closed in the same manner, and with the same material; but where a large quantity of it is to be used it should not be tempered as soft as for smaller crevices. Cracks in the floor, and the open joints in the granary should all be thoroughly cleared out with a broom, and all the sweepings thus obtained should be collected and burned.

Such crevices should then be filled with the clay prepared the same as above recommended, only that one quart of carbolic acid should be added to every cubic foot, or every two gallons of the tempered clay, and be well incorporated in the floor, as well as those in the crevices, and about the bins in the granary should be stopped.

Whilst the clay calking is still fresh and close fires should be built in old pots, or kettles, which are portable, using for fuel chips, or small bits of hard wood.

The fuel in the vessels should be ignited at a safe distance from the building, and when it has burned so that there is no danger from sparks rising to the roof, or lofts, the vessels containing the live embers should be well distributed in the building, setting them on stones or bricks on the floor, taking thorough precaution against fire.

When all is arranged, apply to the embers in each vessel, a handfull of flour of sulphur, and close the building. The sulphur will burn rapidly, and will soon fill the building with suffocating fumes.

These fumes are dangerous to inhale, hence, as soon as the sulphur is applied to the embers, the building should be vacated and closed. To make thorough work of the insect destruction, it is safest to repeat the operation in quick succession. Many have suffered great loss from the barn weevil, and some have stacked out all grain for a year, in order to starve out the insects, and we believe with some degree of success; but the loss of the use of the building is a great inconvenience, and is not as effective as thorough fumigation.

HORTICULTURAL SOCIETY OF MARYLAND.

The organization of the Horticultural Society, was not fully completed at the time of our going to press, and in addition to the report of proceedings so far, we have only to say that the respectable number of persons present at the meetings and the enthusiasm manifested, give earnest of its ultimate triumphant success. It is also known to us that a large number of very prominent gentlemen in the State, are warmly in favor of such an association, who were unable to be present at the meetings, but will become members and lend to it all their aid and influence.

Subjoined will be found the proceedings of the two meetings held for the organization of the Society, which indicate a full success.

In accordance with notice a meeting was held at Raine's Hall, Baltimore, on January 18th, which was composed of Agriculturists, Horticulturists and Florists, representing the different sections of the State, to organize a "Maryland Horticultural Society."

On motion, Ezra Whitman, Esq., was unanimously called to the chair—and J. A. Bolgiano, Esq., appointed Secretary. The chair briefly stated the object of the meeting, and was gratified at the response made to a call first in the *Maryland Farmer*, then by the entire press of the State, by an assemblage so respectable and influential, representing the various interests of the State.

W. W. W. Bowie, of Prince George's county, addressed the meeting on the condition of horti-

culture in Maryland, saying that the exhibition of horticultural products made at the last State Agricultural Fair at Pimlico was most creditable, and with a proper organization they could soon place Maryland in the foremost rank in horticulture. He concluded by offering the following resolution, which was adopted :

"That a committee of five be appointed to prepare a constitution and by-laws and nominate permanent officers to carry out the object of this meeting, and to report at a subsequent meeting of the Society."

The following gentlemen were named as the committee by the chair:—W. W. W. Bowie, Prince George's county; W. D. Brackinridge, Baltimore county; Jno. Feast, Baltimore city; R. W. L. Rasin, Baltimore city; Gen. Samuel Jones, President Maryland Agricultural College.

Mr. Pentland, the Florist, suggested that the meeting determine upon the name of the association, and moved it be called the "Horticultural Society of Maryland," which was adopted.

A. Bowie Davis, Esq., President of the Maryland State Agricultural and Mechanical Association courteously tendered to the Society the use of their Rooms for meetings until they had become permanently organized.

Col. Edward Wilkins of Kent county, moved that the tender of Mr. Davis be accepted, and the thanks of the meeting be voted to that gentleman, which was adopted.

Mr. John Feast—the well known florist, and who has been closely identified with the horticultural department of the Maryland Agricultural Exhibitions—gave an account of the two former horticultural societies in Baltimore. The first organized in 1832 and disbanded in 1839, and the other existing from 1853 to 1857. As early as 1824 there was an agricultural exhibition at the old Maryland tavern, on the Frederick road, which Charles Carroll of Carrollton attended. He said that Maryland had originated and promulgated horticultural and agricultural interests in this country, and thought the charter of this society should be the same as that of 1832.

The following gentlemen who were present signed the roll as members of the society :

W. H. Perot, Wm. Fraser, Robert J. Halliday, John Feast, Henry Taylor, Gen. Samuel Jones, president of the Maryland Agricultural College, Wm. Fowler, Wm. McKenzie, Wm. Jenkins, W. D. Brackinridge, Alexander Fraser, John Cook, Frederick Faulk, Jr., J. D. Oakford, H. Simon, Andrew L. Black, the last ten being from Baltimore county, C. F. H. Walker, S. Sands Mills, W. B. Sands, R. W. L. Rasin, J. Wilkinson, T. C. Dorsey, Lemuel Malone, Wicomico county, Edward Wilkins, Kent county, Dr. John Miller, Tal-

bot county, J. Mowton Saunders, W. W. W. Bowie and E. Whitman.

The meeting then adjourned until Thursday, 22d, at 12 M., at the Rooms of the Mechanical and Agricultural Association.

SECOND MEETING.

Pursuant to adjournment the Society met Jan. 22d, at the State Agricultural Society's rooms, Ezra Whitman, Chairman, and J. A. Bolgiano, Secretary.

The committee appointed at the last meeting to draft a constitution and by-laws, and to report permanent officers, submitted a report through the chairman, W. W. W. Bowie. At this stage, A. Bowie Davis, Esq., offered a resolution, declaring that it was unwise to separate horticulture from agriculture, both of which the Maryland Agricultural and Mechanical Association was incorporated to promote—which was rejected.

The constitution was then taken up for consideration, read, amended and adopted. The name of the society is to be the Horticultural Society of Maryland : object to encourage and improve horticulture in all its branches by such means as may from time to time be adopted. The Anniversary is to take place on the second Tuesday in September, and meetings held monthly, the officers of the association to consist of a president, thirty vice presidents, treasurer, recording secretary, corresponding secretary, and an executive committee composed of nine members.

The meeting then went into an election for officers, when Wm. T. Walters, Esq., was selected as president—R. W. L. Rasin, treasurer—T. C. Dorsey, recording secretary—C. T. Snow, corresponding secretary. The following gentlemen were elected as the Executive Committee: W. D. Brackinridge, John Feast, A. Hoen, Henry Taylor, Louis McLean, Hon. George W. Dobbin, Henry James, J. D. Oakford, and Andrew Black.

The committee reported the names of thirty vice presidents, but was objected to in consequence of so many of the number being from Baltimore city, and two without the State. Upon motion of Col. William Kimmell the names were recommitted to the committee, also the by-laws, with instructions to report none but residents of the State for officers, to name but three from Baltimore city, one from each county, and four from the State at large. The committee was enlarged by the addition of the names of E. Law Rogers and James Pentland.

The meeting then adjourned to meet on Thursday, 29th January, at 12 o'clock, M., when the by-laws will be acted on and the list of officers completed.

PROCEEDINGS OF THE MARYLAND AGRICULTURAL ASSOCIATION.

The first monthly meeting, under the new organization of the Maryland Agricultural and Mechanical Association, was called to order at 7:30 P. M., on January 16th, A. Bowie Davis, Esq., President, in the chair. The Secretary read the resolutions adopted at the last meeting, and the President then rose to make a few remarks. He spoke of the selection of the rooms in accordance with the spirit of the resolutions just read, of the desire to make them an attractive place of resort for the Agricultural and Mechanical interest. Himself a farmer he was thoroughly aware of the mutual dependence and reciprocal need between farmers and mechanics, a reciprocity he was glad to acknowledge. He called the attention of the Association to the fact that previous to 1850, the word "Agriculture" was unknown to the constitutional law, and hardly known to the statute law of Maryland. That in 1850 it was made the duty of the Legislature to extend aid and support to the agricultural and mechanical interests, and this was ratified by the people. That in 1864, the same provision was renewed, and in 1867 it was settled and established that the Legislature should aid and support the agricultural interests. That the first fruits of this wise and salutary provision were to be seen in the Agricultural College, now educating free of tuition 80 of the finest boys in the State. That in 1867 the Association was founded, and \$25,000 were appropriated for the purchase of the grounds, and this not proving enough the City of Baltimore gave \$25,000 more, and this sum still being insufficient, patriotic and public-spirited citizens gave upwards of \$60,000 to complete the purchase of the grounds and the erection of buildings, anxious for its prosperity and credit; the late Johns Hopkins giving \$1000. He referred to his address of January 1st, of the failure heretofore of the Society to have monthly meetings, lectures, &c., and then concluded as follows:

"One word personal to myself. I thought I had reached that time of life which, if it did not entitle me to an honorable discharge, at least entitled me to be put upon the retired list. I find myself, I scarcely know how, certainly not by my own procuring, in the harness again. I am not young and active enough to kick out of the traces, and have therefore no alternative but to bend my shoulder to the collar, with all the zeal and strength that is left me. Should I by over-exertion or want of strength stumble and fall in the furrow, all I have to ask of you, fellow-farmers, and gentlemen of the Association is, tenderly and decently to cover me with the clods of the valley."

The President then offered, with a few complimentary and eulogistic remarks, an Essay by Pro-

fessor Benjamin Hollowell of Montgomery county. The reading was called for by the meeting, and the Secretary read the Essay, which we publish entire in this number, believing it will afford both pleasure and instruction to our numerous readers.

Mr. Dawson Lawrence, of Howard county, then offered the following resolutions, which were adopted:

Resolved, That the able, instructive and interesting letter of Professor Hollowell, just read be printed, for the use of the members of the Association, and that the President be requested to address a letter to Professor Hollowell, conveying the unanimous thanks of the Association for the pleasure, interest and instruction his valuable paper has afforded; and further,

Resolved, That Professor Benjamin Hollowell be, and he is hereby, unanimously elected an Honorary member of the Association.

Gen. George H. Steuart, then offered the following resolution, which was adopted:

Resolved, That a committee of five to be called the Committee on Legislation, be appointed, whose duty it shall be, by memorial or otherwise, to bring to the attention of the Legislature such subjects as shall be referred to it by this meeting or by the Executive Committee of the Association.

Dr. Merryman of Baltimore county, moved the addition of two members to the Committee, which was adopted, whereupon the chair named the following members:

GEN. G. H. STEUART, of *Anne Arundel Co.*

GEN. SAM'L JONES, of *Prince George's Co.*

COL. SAMUEL MALONE, of *Wicomico Co.*

MR. EDWARD WILKINS, of *Kent Co.*

DR. M. MERRYMAN, of *Baltimore Co.*

MR. CLEMENT D. HILL, of *Prince George's Co.*

MR. DAWSON LAWRENCE, of *Howard Co.*

Mr. G. W. Lurman of Baltimore county, offered the following resolution, which was adopted:

Resolved, That the subjects of Labor and Emigration, Sheep Husbandry and County Roads, referred to in the address of the President to the Farmers and Mechanics of Maryland, and in the paper just read from Professor Hollowell, be referred to the Committee on Legislation.

Mr. Dawson Lawrence, of Howard county, moved the addition of "Vagrant Stock" to the list of subjects, which was adopted.

General John B. Pierce, of Baltimore county, moved to add the names of all the members of the Association, and others given to the memorial, prepared by the Committee, which was adopted, and the Secretary was authorized to sign such names for the members.

Dr. Merryman read a letter from the Baltimore County Farmers' Union, complimenting the President of the Association on his address of January 1st, and tendering their sympathy and co-operation,

Remarks were made by Col. Malone, of Wicomico, S. Sands, Esq., of Baltimore City, General Pierce and others. Dr. Merryman moved "to appoint a committee to foster and encourage the formation of minor associations through the counties and districts of the State to co-operate with this Society," which was adopted.

General Pierce offered a resolution, "that the Committee on Legislation request every club to co-operate with them, and send delegates for that purpose," which was also adopted.

Dawson Lawrence, Esq., moved "that all Committees hereafter consist of five members," which was adopted; also, moved that Committees be appointed on the following subjects:—Finance; Legislation; Fences and Enclosures; Fertilizers; Sheep Husbandry; Labor and Emigration; Landlord and Tenant; Machinery; Fair Grounds; Roads; County Organizations, which was adopted.

After remarks by several members, on motion of Mr. Lawrence the meeting adjourned till February 5th, at 7:30 P. M. Fifteen new members joined the Association.

ESSAY OF PROF. BENJ. HALLOWELL.

To A. Bowie Davis, President of the
Agricultural and Mechanical Association:

A permanent improved condition in the fertility of the soil, is of the first consideration to the Agriculturist. The present reliance for this purpose upon Guano, which has to be transported several thousand miles, and other manipulated preparations, must fail as a practical means of improving the whole country, while so much of the product of the soil in wheat, cotton, and other articles, are transported to foreign countries, and equally lost to the land by being taken to the cities, and retained there.

The present system of farming in this country instead of being an *improving*, is an *exhausting* one. Such quantities of wheat, hay, corn, potatoes, &c., are annually sold off the farms, stimulated to the sales by the high prices; and, while these combined products contain *all the constituent elements* of the soil that enter into vegetable growth, the manures applied contain *comparatively few*, and these in *much smaller quantities* than are removed in the crops taken to market, the fertility of the soil *must necessarily deteriorate*.

Now, according to the old maxim, "One *mend-fault* is worth several *find-faults*," the inquiry will naturally be, "what is the remedy proposed?" A piece of land with a "close" soil, (that is, a soil that does not "leach,") when all that grows on it, is returned to it, will *continually improve and deepen*. Hence arises the depth of soil in primitive forests, and on prairies. The annual disintegration of the rocks and clays, by the frosts, and by the *roots of the trees and grasses*, adding means of fruitfulness to the soil *beyond what is fixed for years*, in the standing timber, &c. When in Boston on one occasion, some years ago, Dr. Charles T. Jackson, showed me a glass vase, in which a hyacinth was

growing, the extremities of the roots of which, had imbedded themselves in the sides of the vase, to procure the *potash* which the glass contained, that was needed for the growth of the plant, and could not be obtained by it elsewhere. In like manner do the roots of trees and grasses, penetrate, and thus disintegrate, granite, gneiss and sandstone, to obtain the potash from the constituent feldspar; and soapstone, and talcose earth, to obtain the magnesia, &c. &c. This power to disintegrate the rocks, and extract from them to incorporate into their own structure, what is essential or conducive to vegetable growth, is greater in trees and grasses than in cereals. Hence a growing grass crop, tends to enrich and deepen the soil, and this effect is greater the older the "set" of grass is, as the roots continually extend with age. The rent of a pasture in England is higher in proportion to the time it has been in grass.

This brings us to the proposed remedy. Have as much of the land as practicable in grass. Feed the hay and grain, principally, on the farm, but the green food for the cattle, or as it is termed "soil" them. Turn under green crops, judiciously, so as to get a full supply of organic matter incorporated with the soil, and adopt an arrangement about the house, and on the farm, by which *all waste organic matter* will be mixed with the soil during its decomposition, the soil thus absorbing and storing up the disengaged gaseous elements, ready for use by the plant that shall be entrusted to it.

But, some portions *must* be sold, to supply the cities, and replenish the finances. Let a plan be devised for returning all the refuse and waste matters of a city, including solid and liquid excrements, all of which are noxious there, back again to the country, where they will be serviceable. I think it was Lord Palmerston, who said, "There is no such thing as dirt, *per se*." "Dirt is only a thing in a wrong place." What might be "dirt" in a city, would be a "jewel" on a ploughed field.

Car loads, and cart loads, and boat loads of cattle, hogs, flour, potatoes, coal, wood, &c. &c., are brought to a city, and gradually distributed in parcels varying in size and weight to every family throughout its whole extent. Then, by returning processes similar to those used in the distribution, let all the waste, refuse and excrementitious matters, *deodorized and dried*, be collected into car loads, cart loads, and boat loads, to be returned again to the soil. It has long been a maxim with me, "that a right way can always be devised by the human intellect, for effecting every good purpose," and I feel so confident that the purpose here hinted at is a good one, that I am perfectly convinced, *were the want felt with sufficient intensity*, a plan could readily be contrived for effecting it. Such an arrangement in Baltimore, would be worth more in its benefit to the surrounding country, than all the Guano imported into the city; and its addition to the purity and healthfulness of the atmosphere, would be incalculable. And how much more in harmony with practical and rational ideas, thus to utilize the manures *we have at home*, than to send a quarter of the way round our globe to obtain them! But I find the deep interest I feel in this subject is causing me to dwell too long upon it, and I must stop.

The object next nearest my heart in farming, is *sheep husbandry*. John S. Skinner once came to

me while I was Professor of Chemistry in the Medical College in Washington, to analyze some German "Cattle Powder" for him, and in course of conversation, I found he was a great advocate for sheep-raising, and he made a remark in their favor that made a strong impression. It was that "a sheep can never die when it was in debt to its owner. With its annual fleece, and its lamb, it paid in full for its keeping." A sheep range, if not over-docked, in land that does not "leach," I have been credibly informed, becomes richer every year, the droppings from the sheep, together with the disintegrating effect of the grass roots in the soil, being more than an equivalent for the parts of the soil that are incorporated in the animal and its fleece. But, sheep husbandry can never be profitable without protection from loss by dogs, and to devise a means of affording this protection, with justice to all parties, should, in my opinion, be an early and earnest engagement of the Association. Two or three points of inquiry suggest themselves, which my information does not enable me to answer, whether a dog that is kept full-fed from early life, will chase sheep to injure them? Whether there are not some breeds of dogs that are exempt from this instinct, and might be exempted in a general law on this subject.

In the matter of good roads, thou art a Pioneer in our neighborhood, having inaugurated our system of turnpikes. I never drive to the City of Washington without feeling grateful to thee, for the shorter time, and greater comfort of the ride. But, great room for improvement exists in the county roads, and in the system, (if it can be called a system) by which they at present receive attention. To the business farmer, next in importance to good soil, is a good condition of neighborhood and market roads.

Some years ago, I wrote with much care, an article on the subject of roads, which was published in the Rockville paper, but I have not a copy of it. I however, enclose thee an article I wrote "on the respective rights and privileges of the Public, and of the owners of the property through which the roads pass." The principle this article advocates, has been very generally recognized in this section of the county, so that there is no longer a necessity to *fence against stock*. Gates are left open, and bars down, with safety. My Son-in-law, Francis Miller, has taken away his front gate, leaving his large lawn, with its flowers and shrubbery, open to the road, without any animal having entered to disturb it materially. The fact is, animals are no longer turned in the road, and we find it a relief, comfort, and convenience, that cannot be estimated in dollars and cents. I think it would be a benefit, if the ideas this newspaper article contains, could be disseminated through the State, in order that Farmers may know their rights in this respect.

Then, the question of Labor, not only on the farm, but in the farmer's families, is one that presses prominently for solution. A co-operative or neighborhood Laundry, at which the washing and ironing of a family could be done would be a great relief to the present domestic arrangements. My hope has been, and still is, as labor becomes more intelligent, and thus of greater efficiency, that a plan will be devised for conducting a farm on the co-operative principle. In a large operative

Establishment, in Wales, I think, of which I read a very interesting account some time ago, the proprietors adopted the co-operative principle, estimating for each employee as holding a portion of stock, which at the legal or agreed rate of interest, would produce a sum equivalent to the value of his labor. Say, if his wages were 300 dollars, and the rate 6 per cent, his share of stock would be reckoned at 5000 dollars, and every part rated accordingly, and it was a perfect success. The operatives felt their position to be more elevated; which imparted a stimulus to their exertions, so that more labor could be performed with less wear on the system. One year, the profits of the Establishment fell off considerably, but all accepted their diminished share of the profits cheerfully and resolved upon increased economy, in the hope of better times another year, which were happily experienced. What might have been the result had it been otherwise, we cannot tell; but it appeared as if there was such an identity and community of interests, and such confidence in each other—proprietors and employees—that they were ready and willing, to go to work, vigorously, on such plans as their combined wisdom and judgment regarded as best. Horace Greeley, who gave more thought to this subject probably than any other man in our country, says, in an article on Co-operation in "Wood's Household Monthly," "I hold that tens of thousands immediately, and hundreds of thousands more remotely, of those who now work for wages, may, wisely and usefully combine their means and efforts, in the prosecution of their several pursuits on the principle of co-operation. Co-operation is not communism, and has little resemblance thereto. It is the principle that underlies every joint stock, bank and insurance company, together with most American manufactories. The profits enure to the stockholders, after the payment of wages to every worker. In co-operation the stockholders and workers are mainly the same persons. He who has one hundred shares, will receive ten times as much dividend as the owner of barely ten shares; but the latter may receive the higher wages, if he be the more efficient worker. The object never lost sight of, is, to *give every stockholder, and every worker his righteous due, neither more nor less.*"

The plan of co-operation which he had in mind, when making this statement, was different from that previously referred to, when the wages were converted into capital stock; but all are looking to the same great end, of justly blending or combining Capital and Labor, so that "*all may have their righteous due, neither less nor more.*" For joint stock, or neighborhood Laundries, Cheese Factories, &c., the employee's should be stockholders, the amount of stock reckoned to each one, being a sum, the interest of which at 6 per cent. would be what his salary was estimated at. But I have not been able to devise even an approximate plan for *conducting a farm* upon the co-operative principle. The nearest approach to it, is the method thou appears to have adopted, of building comfortable and slightly tenant houses, and apportioning to a laboring family an amount of land proportioned to the working force he can devote to it, then equitably sharing the yield. In such an arrangement the labor of the children could be utilized by the tenant. But I am making my letter too long. It has pleasantly occupied all my spare time through

the day, and it is now 8 P. M. I have had many interruptions, which would break the train of thought, but I trust thou wilt be able to gather the ideas, and if they afford thee any interest or gratification, I shall be amply rewarded. If there are any portions of the letter which thou thinkest might interest the other members of the Association, there will be sufficient time before the meeting to select these, and to become a little familiar with the handwriting, which I know is difficult to read.

As I understand thy letter, the meetings are to

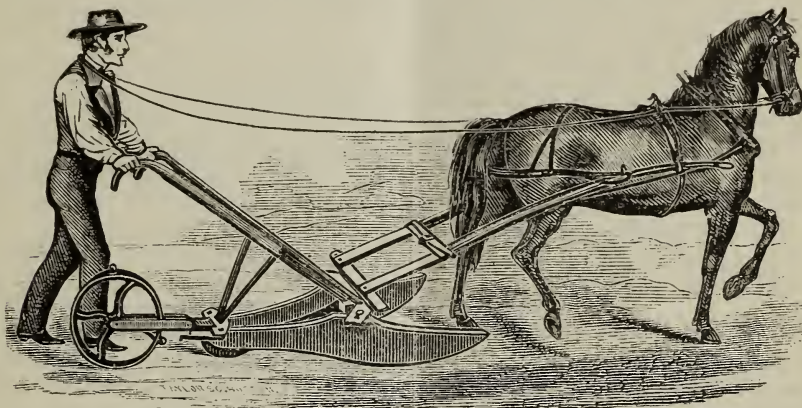
be monthly, different points might be presented and discussed at different meetings.

Although I have entered no disclaimer, I would not have thee think I am not sensible how much the goodness of thy heart has caused thee to overestimate me, but I accept it as an evidence of kind, affectionate and brotherly feeling, *which I sincerely reciprocate.*

Thy sincere friend,

BENJN. HALLOWELL.

NEW IRON TOBACCO RIDGER AND HOER.



The above cut represents Whittemore, Belcher & Co's improved Tobacco Ridger, &c., which they claim has the easiest holding and lightest draft of any tool of the kind in the market. The improvement consists in the removal of the old smoother, as originally attached to the machine, and now use a wide wheel which answers for smoother and marker at once; this leaves a clear space for the soil to pass between the shear-plates, thus avoiding the constant clogging so much complained of. It is so constructed as to admit of the back ends of the shear-plates expanding some ten inches to allow the tops of potatoes to pass through without injury; thus making a tool for hoeing potatoes, corn, &c.

SHEEP HUSBANDRY vs. DOGS.

To the Editors of the Maryland Farmer:

I am an old subscriber to your valuable magazine, and I wish that every intelligent farmer in our county would take more interest in their calling, and be enrolled on your list as a subscriber. Your paper is devoted not only to agriculture, but has been advocating a system of improvement which many farmers are slow to adopt. There is a great deal to be done, or left undone, before we farmers enter on a judicious system. Railroad companies, mechanics, and other associations, generally take such measures in the conducting of their business as to achieve success—but the farmer is slow to learn what his true interest is; and many things of great importance are neglected altogether—one of the most important is, that so many valuable sheep are killed by worthless dogs.

Sheep husbandry could be made profitable in Maryland, and particularly in our county, but the ravages of dogs has checked the enterprise in many localities altogether. Almost every week we hear of the loss of sheep by worthless curs;

generally done by dogs whose owners pay no tax. There are many poor laborers that cannot raise a hog, but have two or three half starved dogs; they are roaming about at night killing sheep, and doing other mischief. If a dog law could be passed by the legislature taxing dogs, sheep husbandry would soon flourish, and farmers would raise the more improved breeds; a tax of about three dollars on every dog large enough to kill sheep would do away with the worthless cur at once, and give a new impetus to sheep husbandry. We have a fraction over 5,000 sheep in our county; this number is exceedingly small; would in a few years be four times this number, if a law was enacted protecting our flocks.

It is with pleasure we hear that A. B. Davis, Esq., President of the Agricultural Association of this State is taking an interest to have a law passed by the legislature for the protection of sheep and a dog law, and hope you will advocate this important subject in your valuable Magazine and second the effort of Mr. Davis. This subject was under discussion for the last ten years by farmers, but nothing accomplished yet and never will be until agricultural associations, with the co-operation of agricultural editors take it into hand.

Baltimore County, January 12th, 1874.

HORTICULTURAL.

POTASH FOR PEACH ORCHARDS.

According to the statements of a Mr. Shepard, at a meeting of the Cincinnati Horticultural Society, says the *Country Gentleman*, potash is a cheap and an excellent manure for peach trees. A barrel, costing \$35, lasted him four years for an orchard of 25 acres. He dissolved the potash in water, making it of a strength just insufficient to float a potato, and then gave each tree two quarts of this liquid every spring. From 2,000 peach trees treated thus he sold 1,500 bushels in 1867, 680 do. in 1868, and "last year" (1871 we suppose) 1,800 bushels, and prospects still good for satisfactory crops in the future. He claims to have sold \$12,000 worth of peaches from this orchard in five years. This would be an average of \$1.20 per tree for each year; a good yield certainly. If potash in such small quantities will produce such an effect, it must soon come into general use.

SALT FOR PEAR TREES.

It will be remembered says the *Horticulturist* that last year we introduced the topic of salting around pear trees to prevent the blight. We learn, on a recent visit to Central New York, that the practice is becoming general, and regular applications yearly of 400 to 600 pounds per acre, are now the custom. We notice also a favorable experience from a correspondent of *The Small Fruit Recorder*:

"Last spring I put a small shovelful of the refuse material from the salt works—which is composed, I believe, of salt, lime, and ash—around a four year old pear tree. It has made a very thrifty growth, and the leaves are all free from blight or spot, and have a very glossy, healthy look; while others of the same lot, manured with barnyard manure, have grown but little, and the foliage is spotted and dull. Now, if no ill-effect may be attributed to the barnyard manure, it would seem that the difference in these trees was owing to the salt."

PEAR TREES AND OXIDE OF IRON.

The Scientific American says the practice of mixing iron scraps, filings, or drilling chips from machine shops, in the soil about the roots of pear trees, is becoming general with some of our best fruit growers. The health and productiveness of the trees are greatly promoted thereby. Pieces of iron hoop, old scythes, and other useless bits of iron, have long been used by the most successful growers.

NATURAL FRUIT.

A correspondent of Chester Co., Pa., wrote, some time since, to the *Germantown Telegraph* in regard to some peach experiments, which are interesting:

"Three years ago I planted a quantity of peach pits from yellow peaches which we had raised from budded trees. This season about a dozen of the young trees fruited. All bore yellow peaches as large as those on the original trees, which are still bearing, and some much larger. Their flavor was excellent, not excelled by any peaches we ever raised.

"A neighbor had a Morris White peach-tree growing in his garden, which has sent out a shoot from below where it was budded. Both tree and shoot bore peaches this season, those on the shoot much superior to the Morris Whites. Some of us are considering whether budding improved that tree."

Of course it is known to all fruit-growers that all our fruit was originally natural, and that choice varieties are obtained by planting the seed extensively. If from five thousand pits of the peach planted, one first-class peach is supplied, it is a success. It is so with all other varieties of fruit.

APPLE AND PEACH CULTURE.

The following we copy from the *Rural Messenger*. It is an extract from an address delivered before the Virginia and North Carolina Farmers' Convention by J. W. Fitz:

No farm or garden is complete without a select orchard, or trees of apples and peaches; and if you do not raise your trees, can you not spare a few dollars in the year to buy them, and a few days in the year to cultivate them?

If you wish to sell your farm, plant an orchard; if you do not wish to sell it, still plant an orchard; it will be a rich legacy to your children, and a memento of your care for them.

There are two great faults of unsuccessful orchard culture in the South—planting too deeply and neglect of *after-culture*.

SUGAR BEETS FOR PIGS.—Mr. Jonathan Talcott states that a Suffolk pig was fed on boiled sugar beets three times a day, from August 16th to October 1st, during which time his weight increased from 360 to 450 pounds; the gain during September being sixty pounds.

Boil your potatoes and peel them; put them in hot pork fat; turn them until well browned. They are delicious and very mealy.

Live Stock Register.

THOROUGHBRED TROTTERS.

Technically considered, the thoroughbred horse is one whose pedigree can be traced back through imported stock to the English Stud Books, and through these to the east, whence the modern English thoroughbred ancestry came. It does not prove that a horse is a good animal. In the practical sense, the word stands for and symbolizes certain indispensable qualities which give value to the animal, and decide his rank in the grade to which he belongs. Among these may be mentioned beauty of form, toughness of bone and muscular structure, vivacity and docility of temperament, intelligence, and above all, perhaps, in value, the power of endurance and the desire to do; what horsemen express by the word game. All pedigrees are worthless save as they indicate and warrant that the horse with the noble ancestry is noble himself. For all practical purposes a horse which has a certain perfection of form, a certain degree of intelligence, the power to do great deeds when called upon, is a thoroughbred horse. Beginning with Dutchman, and coming down through Lady Suffolk, Flora Temple, George M. Patchen, Ethan Allen, Dexter and Goldsmith Maid, we have had for the past fifty years in this country a race of horses of trotting action of as fine a spirit, and as great powers of endurance as any others that were ever bred.

In perfection of structure, in the symmetrical adjustment of all the parts, in intelligence—that surest proof and crown of good breeding—in dauntless resolution that stopped not short of death itself in the hour of supreme performance, these horses, and countless others like to them, were, I claim, second to none that ever delighted the eye and made proud the heart of man. I object, both on the ground of sentiment and proper classification, to such a definition of a thoroughbred, that in order to be just to the one class of horses, one must be unjust to the other. Where they are equal in performance, they should be equal in honor. Who shall say that old Topgallant, when

he went against Whalebone four-mile heats, trotted them in 11:16, 11:06, 11:17 and 12:15—that is, making his sixteen miles in forty-five minutes and forty-four seconds, which is just 2:52½ to the mile, and that too, when he was twenty-two years old—is not worthy to stand beside Eclipse, or Henry, or any other horse that ever ran a race?

There is a right and a wrong to this thing; and for one I assert that the nomenclature is faulty, and the classification vicious, which covers Longfellow and Harry Bassett with laurel, and leaves Dexter and Goldsmith Maid without a spray. There is, therefore, as I understand the merits of the case, two great families of thoroughbred horses instead of one, in this country. The one is the thoroughbred running horses, the other is the thoroughbred trotting horse. The latter family of horses possess the very qualities for which the English running horse has so long been noted, and in as great a degree, as the history of its performances shows; but are distinguished from the English thoroughbred by their style of going; and to this family, by every law and rule of justice, the same honorable nomenclature must be given.—*Murray's Perfect Horse.*

PROFIT IN FEEDING SHEEP.

At a meeting of the Farmers' Club in Batavia, Georgia, Burt presented the following definite statistics relative to cost and profit of feeding sheep for market. He paid for 200 sheep for fattening, \$915; for keep, two months, \$64; 8 tons of hay at \$16 per ton, \$120; 4 loads of corn-stalks, \$16; 148 bushels corn, 60 cents a bushel, \$84.00; one barrel salt, \$3; interest on money invested, \$20.75; total, 1,227.55. January 4, he sold 175 sheep, at 8 cents a pound, 1,435.40; 28 at 6¼ cents a pound, \$181.79; one pelt, \$1.50; total, \$1,705.69; profit on the 200 sheep, \$478.14.

The above facts are interesting as showing the prices paid for good store sheep, for hay, corn, corn-stalks and salt for their consumption, and the good price at which they were sold when ready for market. Had farmer Burt been compelled to sell his fat sheep at six cents a pound instead of eight, his profit would have been limited to the good pile of manure made by two hundred sheep. In Georgia, the price he paid for store sheep (over \$4.50 a head) would be deemed remunerative if good mutton. Our long experience and observation leads to the conclusion that mutton and wool are generally the most profitable crops raised on the farm. Nevertheless, sheep are liable to accidents and depredations, and require pretty close attention. A thorough business man in the South might overcome all difficulties, raise feed for his stock, and make a fortune by the natural in-

crease of his flock and by the annual sale of wool. Bermuda grass, white clover and lucern will do well in Georgia with fair treatment.—D. LEE, in *The Plantation*.

POTATOES FOR ANIMALS.

R. Decker, of Philadelphia, in the *Germantown Telegraph*, thus discusses the feeding of raw and boiled or steamed potatoes to animals, which may prove of interest :—

Potatoes in the raw state ought never to be given to any animal, with the exception of sheep or geese. A goose will thrive better, and the flesh will be more gratefully flavored, upon raw potatoes sliced, than if more or less mainly fed upon any other article; while sheep will more speedily thrive upon raw potatoes than, for instance, on turnips; but, and especially in the beginning, raw potatoes will scour cattle and horses, and not unfrequently cause death, while there is no danger to either one or the other from boiled or steamed potatoes. Pigs will not always eat and never can be fattened upon raw potatoes; while sound boiled potatoes, next to boiled peas perhaps, will bring them to the greatest weight they are capable of acquiring, and to greater perfection than any other article of food that may be continuously used with safety, admitting always that from three weeks to one month's feeding upon corn, white oats or barley is necessary, if not indispensable, to make the bacon firm and impart flavor.

Boiled or steamed potatoes, with scalded bran and plenty of good hay, are very conducive to the growth of young horses intended for fast traveling, like roadsters and saddle-horses, adding cautiously at first bruised prime white oats.

Last, but not least, it may be stated that *manure* from neat-stock fed on steamed or boiled potatoes is better than that of stock fed upon turnips, unless the latter be liberally offset by corn-meal, linseed cake and other material rich in oil and nitrogen.

The above may be interesting to farmers who, owing to location, have not a well-paying outlet for an abundant yield of potatoes.

"FAT SHEEP MAKE FAT CROPS."—G. G. in the *Country Gentleman*, says:—Having just seen this old saying quoted by one who sold his lambs this year, at twelve months old, for 73 shillings sterling or nearly \$20 each, I cannot refrain from remarking how the experience of every good agriculturist coincides with what has been so persistently advocated by me for several years, viz., that a good system of sheep husbandry would renovate much of the land which is so miserably exhausted and that if all new land brought into cultivation was prevented from losing any of its plant food, by making numerous fat sheep, there would not be the gradual and certain falling away of the heavy crops grown on the virgin soil.

Never speak to deceive, or listen to betray.

USEFUL RECIPES.

STAGGERS. Take one ounce of camphor, half ounce asafoetida, one teaspoonful saltpeter and dissolve in one quart of brandy or whisky. Give the horse a drink four mornings in a week, not permitting him to drink cold water for six hours afterward. Give the horse an injection composed of one pint meal, two quarts water, one quart molasses, and one spoonful hog's lard. Let the horse be moderately exercised and well rubbed.

Another.—Take one gallon of green hickory wood ashes, half-pint of spirits turpentine, one ounce gum camphor and a sufficiency of lye to make a thin mush, fill a horn with this mush, while boiling hot, and with a thin cloth stretched over the end of the horn, apply it four times upon or over the region of the brain, each time filling the horn with the boiling mush, which will blister the skin. In connection with this, it is necessary to burn rags with spirits of turpentine under the horse's nose until you produce a free discharge. You should also bleed freely from the neck, and give one pint of linseed oil as a purge.

The following we clip from the *Live Stock Journal*:
SPASMODIC COLIC.—First place the animal in a large stall, containing plenty of straw, so that on laying down there will be no danger of contusions. As soon as possible, give one ounce of tincture of opium, and one-half ounce of sulphuric ether, mixed in a pint of lukewarm water or gruel. If the animal is not relieved in half an hour, repeat the above dose. Be careful to shake the bottle containing the medicine all the time while administering. Injections of soap and warm water may also be used to advantage. In all cases keep the animal as quiet as possible.

THUMPS.—Are caused from over-heating and fast driving or riding, and can be cured with the following remedy without fail says a correspondent in *The Plantation*:—Give the horse salt-water to drink seven or eight times a day and feed him on wet fodder.

Another.—Take a handful of table-salt (or Liver-pool) and put in a bucket of cold water and let the horse drink of it three times a day as much as it wants.

HOW TO KEEP THE COAT SLEEK.—If it is only to remove the dust from your horses' skin, you will find sweating the best method. When cleaning afterwards, use a damp straw wisp. The sweating will throw the dandruff to the surface, and it will adhere to the damp straw. Use a stiff brush instead of the curry-comb.

KNEE SPRUNG.—There are many causes for sprung knee in horses, and I think the most common is an unhealthy action of the feet. If such is the case with your horse, I would advise you to have him shod with a thin-heeled shoe, so as to have the frog of the foot come in contact with the ground, and to use with such a shoe for a few months, when you will be able to judge whether it benefits or not.

A RAW CUT.—Keep inflammation down by fomentation with warm water daily, and to the wounds apply once every day, after being washed clean, a dressing of the following liniment: Spirits turpentine, 2 oz., olive oil, 6 oz.

SPRAIN.—The best treatment for sprain in the first stages is to keep the horse perfectly still, applying ice-water as often as possible, and when left put on a heavy water bandage, covered with a dry one.

The Poultry House.

For the Maryland Farmer.

POULTRY BREEDING.

NUMBER TWO.

Almost the first thought of the person whose mind has been fixed upon this subject is "what variety shall I keep?" His next step is to write the editor of his paper for information upon that subject. Next he writes to some half dozen or more fanciers or breeders for their circulars and price lists: these he diligently peruses and he finds himself more befogged than ever. Mr. A. writes him that the Light Brahmas have more good qualities to recommend them than any and all other varieties and states that he has a few grand birds which he will dispose of cheap, to get rid of them.

Mr. B. says that the Cochins will give our young fancier more pleasure than Brahmas or anything else, and after enumerating their good points, offers to spare a few choice birds at so much per trio. Mr. C. tells him that the Games are the very best fowls living, and that the kind he (Mr. C.) is breeding are far superior to any others. Mr. D. writes that the Leghorns combine all the good qualities without any of the bad ones, of all the best varieties; and he must buy this variety if he wants both pleasure and profit. And thus the changes ring, and our would be fancier is completely puzzled in trying to reconcile the conflicting stories of those who are anxious to sell their surplus stock.

To those who have, or may have a touch of the fever, and who are intending to "start a poultry yard," I would advise, "make haste slowly." Purchase some reliable work on poultry: "*Wright's Practical Poultry Keeper*," price \$2.50, is perhaps the best, and study it over carefully. If you wish to invest in a larger work, "*The Illustrated Book of Poultry*," by the same author, will be found to be of more benefit than all other books on this subject put together. It contains 50 colored plates of the different varieties of Poultry, with minute and complete descriptions of each. Also instructions regarding breeding, management, &c., &c. Price, elegantly bound in gilt, \$15.

After deciding which variety will best suit your needs, or best adapted to your circumstances and surroundings, then, and not till then, write to some breeder of that variety for price and information: Success depends a great deal upon commencing rightly. If one has but a limited space in which to keep his fowls, and buys a variety requiring a large range, he soon finds that the expected harvest of eggs is not forthcoming, and unless he has better

luck than the majority of beginners, he must sacrifice his first purchase to pay for the experience which he might have gained at much less cost.

Remember that the fowls which thrive and produce an abundant supply of eggs on the farm, may not be the kind that do best in confinement. If eggs only are wanted I should advise first the Leghorns, second Hamburgs, third Spanish. If eggs and chickens both, first the Brahmas and next the Houdans. The latter, however, being non-sitters, it will be necessary to keep a few common hens for purposes of incubation. All of these varieties do well in very limited runs; and also thrive and lay abundantly on the farm. The cochins are favorites with many, but they are such persistent setters, that I cannot recommend them as a profitable fowl for the beginner. By all means commence with *pure bred* stock, even if only a trio—a cock and two hens. It cost no more to feed pure stock than mongrels, and as a rule, the pure bred fowls will lay nearly twice as many eggs in a year as common ones. Then whatever surplus stock there is to be disposed of, can generally be sold at a considerable advance over usual rates even in sections where "fancy fowls" are a novelty. It is astonishing how soon the fever spreads. One man in a village, purchasing a trio of choice fowls, although at first being ridiculed for his investment, generally finds before the season is over, that his surplus eggs and stock will all be taken by his neighbors at a good round advance on the prices heretofore paid in that locality.

A. M. HALSTED.

THE CROWNED PIGEON.

This is the king of pigeons. If he is not generally so considered, he ought to be, for he is the largest of his tribe, and besides having a grand and royal demeanor, he wears a crown. The crowned pigeon never forgets his deportment. When he uses his voice, which is very deep and hollow for a bird, he bows his head every time he utters a note, until his crest sweeps the ground.

Even when a captive he lies down in a cage to dust and air himself, he spreads one of his wings over him like a canopy. These pigeons are natives of Java, New Guinea and the Mollucca Islands, but they seem to thrive very well in captivity, and some of them may be seen in the collection of birds at Central Park. Their color is a deep slate blue with a white and brownish patch on the wings.—*Hearth and Home*

The fumes of a brimstone match will remove berry stains from a book or paper engraving.

LADIES DEPARTMENT.

A CHAT WITH THE LADIES FOR FEBRUARY.

BY PATUXENT PLANTER.

"It is a Winter's night,
And the still earth is white
With the blooming of the lillies of the snow!
Once it was as red
With the roses of summer shed,
But the roses fled with summer long ago!

"We sung a merry tune
In the jolly days of June,
And we danced adown the garden in the light!
Now FEBRUARY'S come,
And our hearts are dank and dumb,
As we huddle o'er the embers here to night."

There is not much in this month to stir the blood and fire the imagination, except about the 14th, when Valentine's famed anniversary sets the young brains at large, to find rhyme and if possible rhythm beyond "dove and love, bliss and kiss," and as that is fourteen days off, you will pardon me for not mounting a Pegasus, but taking it quietly a foot in a hum drum way and talking about practical domestic matters. *Firstly*, as the good preacher begins, let us chat about *Poultry*, as this month the respective colonies should be established, so as to get used to their respective homes and haunts before the serious work of rearing and nursing their young, progenies engrosses all their attention. An abundance of fine poultry is half of the comfort of country living; includes much of the larger portion of country household economy, and often stops a great leak in the "good man's" pocket. It saves many a fine lamb, pig and calf, which otherwise, in time, would swell the farm profits to a large sum. Obtain, even at high prices, good specimens of the best breeds of the different kinds of poultry you may determine to raise, and I would advise you to settle upon one or two, at most, of different breeds; too great a variety of breeds, make much trouble, and become soon unsaleable as distinct breeds, unless kept in separate enclosures, which is attended with expense and much trouble. I would suggest, that you start with Light Brahma or Partridge Cochins; Rouen or Cayuga Ducks; Bremen or white China Geese; Bronze Turkeys; a variety of Pigeons, with White or Game Fantams accommodated in small fancy houses on the lawn as useful ornaments and objects of amusement to visitors and children. Feed all well; give them the strictest attention; take an interest in them as *pets*, you desire to show to your friends with pride, and be assured you will find in it a source of pleasure, and a lot of pin-money, besides, the satisfaction of furnishing your table with the luxuries of eggs and such plump, fat poultry as will call forth the unqualified praises of all who may have the good fortune to sit at your well furnished table, for she who of herself raises nice poultry will have every other appointment of her hospitable board in apple-pie order. Bear in mind, one or two general rules. Hens should be young and not kept over three years old; ducks not over five; geese, the older, the better, and turkeys ought to be from 2 to 5 years old before they are bred from. Poulterers say between those ages, the latter the best, the broods will be stronger,

larger and healthier. Try it, ye who usually raise only from young ones.

In the last twenty or thirty years, poultry of all kinds, owing to judicious propagation and great attention has increased in size and weight fifty per cent. and two hundred per cent. in market prices. This is encouraging to beginners with the improved breeds. One Thanksgiving turkey, at Stonington, Ct., on the borders of Rhode Island, famed for the Narragansett turkeys, weighed dressed *thirty-six and a quarter pounds!* These improvements in weight of fowls has been obtained without detriment to the flavor, or the fineness of grain of the meat. A Brahma less than a year old, ready for the table weighs more than an ordinary hen turkey. There is more meat in one of their eggs than in two of the common barnyard fowl. There is both pleasure and profit in rearing such splendid poultry.

Now ladies can you tell me why it is that in these hard times, when it is said royalty itself, in Europe, is consulting economy, that the fair sovereigns of Republican America has made it fashionable to discard the once cheap, but neat and pretty calico morning dress, adorned with that beautiful little white apron, plain or ruffled, and *must* appear in mousselin, cashmere or poplin, all trimmed and befurbelowed. The latter unfit to wear in house-keeping and of three times the cost of the sweet looking calico, made plain, with white collar and cuffs, and the acme of taste and beauty, the dear little white apron. A plain looking woman or girl looks well in this costume, while it adds a home-charm to the lovely belle in the eyes of every refined and manly taste. Let us see sometimes our idols dressed with simplicity, when they will be "adorned the most," homeliness requires gew-gaws and paints and other "makings up," to cover over defects and distract the critics eye, but real, substantial, healthy beauty needs no ornament beyond natural graces and charms robed modestly in simplicity. Them's my sentiments, and I am no querulous old cunnudgeon.

Let me close our chat for this month by calling your notice to this gem I snatch from the bright garland of beautiful thoughts on flowers, Mr. Vick has woven in the New Year number of his admirable *Floral Guide*:

"Tens of thousands who live in cities, with not one foot of soil, love to read of flowers and their culture. Like an almost forgotten song of childhood it brings up pleasant memories of early, happy days, and touches a sweet cord in the heart. Many, too, are looking forward to a pleasant old age as a fitting reward for a life of virtuous toil—a second childhood, when they can again live among the flowers and trees and birds. Happy they who are wisely prepared by a useful and moderate life for a cheerful old age, with no faculty overstrained and ruined—like old and noble trees of the forest, which have stood unscathed the storms of scores of Winters, with no limbs twisted or broken or decaying, no leaf blackened with disease or frost, but with every branch firm and smooth and well ripened, and every leaf fair though sear, marking the seasons, as they pass pleasantly away, by their unfolding and fall."

MEXICAN CLIMBER.—John Quill, of Cincinnati, writes the *Gardener's Monthly* as follows:—"The fragrance of this beautiful climber rivals the rose, the mignonette or the lix. When planted in a group, it forms a perfect mass of green foliage, fairly covered over with spikes of delicate white blossoms, sending sweet perfume all around. Should be planted in one half sand, the other half loam and leaf mold, in the open ground and a warm situation."

For the Maryland Farmer.

ECONOMY.

"Hard times! Hard times; is all the cry,
The country's in confusion,
The Banks have stop'd and still they try
To mystify delusion;
They give us trash, and keep the cash
To send across the water,
To pay for things, they buy from kings,
To gull our son's and daughter's."

To the world of Traffic and Trade, this New Year did not dawn as brightly as was New Year's wont. "Business is dull," said the merchant leaning over the counter. "Money is tight" exclaimed the owners of well filled pocket books, and they grasp them closely to prove their assertion. "Times are hard," groans the Father of families, looking worn and troubled. And the familiar word economy is heard on every side; economize is the order of the day, but where must it begin? There is nothing in men's daily habits, or business matters they can possibly economize in, so the merchant, the broker, and the professional man, all agree economy must begin *at home*, and in the ears of the already anxious wife, the word economy is pitched to every key from C Minor to C Major, and womens follies and womens extravagance, furnish a text for the pulpit's orator, and the bar-room jester. Economize, indeed, it's very hard to do, when silks, laces and furs, are selling at panic prices, and dry goods are almost given away. Do you know why they are so cheap? Because women can economize, and *won't* buy them. Economize! how can they? when *tobacco*, *cigars*, and *liquors*, are selling at standard prices. Do you know why they are so high? Because men *won't* economize, and *will* buy them.

"First cast the beam out of thine own eye, then shalt thou see clearly to pluck the mote out of thy sister's eye."

WICOMICO.

January, 12th.

CATTLE AND HOME EMBELLISHMENT.

Messrs. Editors:—I write briefly to sympathise with Polly Pecked Spinster, who under the head of "What are Woman's Rights" in your Household Department, gives an account of the destruction of a vine which had been carefully tended all summer, by the nibblings of a calf, and she offers an indignant—I may say righteously—indignant protest against the policy of those farmers who insist upon making a calf pasture of the lawn which the ladies tend and beautify so assiduously.

I had a beautiful honeysuckle (Japan—*Lonicera Italiana*—by some named the *French*.) growing up in evergreen splendor by our lawn gate. My object was to train it up the posts—they are seven feet high and arched—and over the arch, and make a delightful living entrance way: it has been repeatedly knawed or broken down, as fast as I got it growing nicely, and the last time I had it nearly up to the top when one day I found my pet, broken: the cattle were pasturing not in the lawn but in the field outside of it: but I have good news for Polly and other similarly afflicted floriculturists: William—that's our chief—says hereafter he will adopt the soiling system of feeding: he will keep the cattle in the stable or stalls, and cut the feed and carry it to them, having become tired of the miserable old fashioned way of having cattle loose, where they are always

getting into mischief and making trouble, either for himself or some one else. He says it's the right way to keep cattle anyhow, and I suggest that your fair readers persuade their lords and lovers to do likewise; then we can run up the beautiful climbers and make our parterres without feeling that our labor will probably only end in cow-feed: let us adopt the new order of things and make the farm not only fertile but home-like and beautiful.

FRANCES FAIRVIEW.

PUBLICATIONS RECEIVED.

Moore's Rural New Yorker: Terms \$2 50 per year.

This valuable weekly, instead of being extinguished in its usefulness by the deeply regretted financial embarrassment of its venerable founder, which we hope will only be temporary, comes to us not on'y as bright and full of information as heretofore, but *improved*. There is no evidence of its falling; on the contrary, it shows signs of life more vigorous and progressive than ever, which encourage us to hail its visits with renewed pleasure. It is judiciously conducted by an able corps of editors and correspondents.

The American Builder: A Monthly Journal. Published by C. D. Takey, New York.

The January number is elaborately illustrated. It is highly useful to the architect, builder and all who are interested in the erection of houses, &c.

The American Artisan: New York.

This is one of the most scientific and interesting of our monthly exchanges.

Illustrated Living World: A Holiday Annual of the Illustrated Record, New York.

A great pictorial library of sample reading sent free for 25 cts., to induce subscriptions to the largest first class illustrated paper. Enclose to "Illustrated Record," New York.

To-Day: Dio Lewis, editor. Philadelphia. \$2.50 per annum.

This excellent pictorial paper is published weekly for families, and in monthly parts; the latter to be had at the news depots and Bookstores. Dio Lewis is too well known to need an introduction from us. The present Monthly part is neatly printed; the illustrations elegant and the literary matter of a high order. A chromo premium is given to each annual subscriber.

CURES IN THE REACH OF ALL.

The *Memphis Register*, gives the following simple remedies, which if efficacious, are worth their weight in gold, and should be cut out and preserved:—

A tea made of peach leaves is a sure cure for kidney difficulty.

A plaster made of fresh slacked lime and fresh tar is a sure cure for cancer, which with all its roots, will come out.

A tea made of chesnut leaves, and drank in place of water, will cure the most obstinate case of dropsy in a few days.

A tea made of ripe or dried whortleberries, and drank in the place of water, is a sure and speedy cure for scrofulous difficulties however bad.

For the *Maryland Farmer*.

AN IMPORTANT IMPROVEMENT IN THE MILK HOUSE, OR DAIRY.

An experience of 40 years in supplying plans for *dairies*, and the serious difficulties attending the keeping of milk, and other dairy products at the proper temperature during the hot season, has enlisted the inventive talent of the Rural Architect in various countries, for many years.

The main dependence ordinarily, has been on the *spring house*, for cooling and preserving milk, cream and butter.

Few farms, however, have cold spring water in sufficient quantities, so located as to conveniently supply effective and durable cooling facilities from this source.

Many efforts have been made, and liberal expenditure incurred, in attempting to avail of the cooling effects of an ice house, by placing the dairy contiguous to it, and so arranging the apartments as to cool the latter from the former; but it has been found impracticable to control the circulation of the atmosphere between the respective apartments.

The effective circulation of the air, when it could be effected, was found to waste the ice with such rapidity that the supply failed when it was most needed; besides it has been found impracticable to secure and maintain the desired temperature throughout the dairy room. Moisture in the air would condense in the dairy, and the air would unavoidably absorb from the packing material used in the ice house, unpleasant and injurious odors, and by the circulation, convey, and impart them to the milk and butter, and thus render it impracticable to manufacture and preserve good butter with such an arrangement.

With a knowledge of these difficulties, and that there was a great and increasing demand for the most perfect arrangement by which to cool and preserve milk and its products, has induced assiduous effort for its attainment.

In this effort I claim at last, to have achieved the most satisfactory success. I depend on the waste of water of the *ice house* mainly, for cooling, which, of course, occasions no more waste than if the temperature of the drainage was not availed of, and was allowed to flow away as it usually does. But, in addition to this costless medium, by which to cool the dairy, and to cool at any point in the dairy most desirable, I introduce a thoroughly reliable adjunct, an endless circulation pipe, which is filled with water, and the pipe closed, and the same water is used for an indefinite period; its efficiency being the same for a lifetime, as for a

day. One portion of the circulation pipe lies under the body of ice in the ice house, and another portion of it extends into the dairy, and through the sink in which the substances to be cooled are placed. The dairy floor is placed a few inches below that of the icehouse, hence the water in the pipe, as it is cooled by the ice, flows to and through the dairy, by its density, and when it has absorbed heat in the dairy apartment, it becoming rarified and lighter, rises and ascends to the ice house when it is again cooled, and caused to continue its circuit until an equilibrium is established. The temperature of the equilibrium thus attained would be too low for the dairy apartment, and would occasion an unnecessary draft of the ice, hence, it is necessary to regulate the rapidity of the automatic circulation. To effect this to any degree desired, simply requires the introduction of a stop cock in the circulation pipe, by which the circulation and the draft on the ice may be regulated to a nicety, or stopped entirely.

Thus, we have at last attained the long sought desideratum, and a priceless boon to the dairyman.

J. WILKINSON.

"SIGNS OF THE TIMES."—At a gathering, recently, of over 5,000 farmers at Carrolton, Ill. banners bearing the following inscriptions, were displayed:

"Presidents, \$50,000; Congressmen, \$7,500; Farmers, 15 cents a week."

"If any political party stand between us and our rights, let it die."

"A fair remuneration paid for honest toil."

"Equal and exact justice to all."

"Farmers to the front; politicians take back seats."

"We vote for no man who can be bought by grab or steal."

"We will obey the laws, and monopolies must do the same."—*Plantation*.

A NEW METHOD OF KILLING CATTLE.—A new method of killing horned cattle has been introduced in Europe, which, it is said, largely reduces the possibility of inflicting unnecessary torture upon the animal. An iron mask like a continuous blinker is placed upon the bullocks head. So arranged as to close the animals vision, and to mask corrodounding to the spot in the centre of the forehead whereon a blow immediately causes insensibility. A hollow nail of peculiar form made to fit the socket, and having a large head, is then readily slipped in its place, and a single blow of very moderate strength drives it instantly home, and causes death too rapidly to allow of any suffering.